

City of Columbia, MO - Columbia Financial Enterprise Resource System
General and Technical

4.17 - General and Technical				CIS Infinity		
Objective: To ensure that the application operates consistently and to the technical standards of the entities.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
162	Ability for addresses to support the USPS standard.	H	Y		CIS Infinity	
163	Ability to allow for foreign addresses	H	Y		CIS Infinity	
164	Standard system functionality provides ability to import master City / State / ZIP file from a 3rd party (US Post Office) and validate addresses with the system against it. Also defaults City and State, if ZIP is entered.	H	Y		CIS Infinity	
165	Management Dashboard					
166	Ability to provide system data in "management dashboard" views.	H	Y		CIS Infinity	Seven predefined KPI widgets are available (Account & Collection Status, Service Order, Cash, Billing MoveOut/In Summary, Unprocessed Reads, . Data can be exported to Excel.
167	Ability for users to be able to individually configure their "management dashboard" views.	M	Y		CIS Infinity	
168	Ability for users to drill down from "management dashboard" reports to the source transactions.	M	N		CIS Infinity	
169	Ability to display data from data sources external to the FMIS which contain common relational databases	M	N		CIS Infinity	
170	Dashboard provides the ability to format components using bar charts, dials, gauges and graphing components	M	N		CIS Infinity	
171	Ability to establish Key Performance Indicators	M	N		CIS Infinity	
172	Ability to configure dashboard components and publish for other dashboard users to subscribe to	M	N		CIS Infinity	
173	Ability to personalize dashboard components per FMIS user, by configuring input parameters	M	N		CIS Infinity	
174	Ability for dashboard components to filter data based on users department / division	M	Y		CIS Infinity	Cycle/book
175	Dashboard components recognize established system security framework	M	Y		CIS Infinity	
176	Ability to configure dashboard components to visualize trends over time, including comparative activity (e.g. past x months, past x years, this month compared to same month last year, etc.)	M	N		CIS Infinity	
177	Reporting and Printing					
178	Ability for system to provide a reporting environment that satisfies a number of different users needs and levels of reporting sophistication.	M	Y		CIS Infinity	
179	Ability for system to have an integrated report writer with the following features:	-			CIS Infinity	
180	Report Writer capability with file organization structure consistent between all application modules	M	Y		CIS Infinity	Runtime license of Crystal Reports included with CIS Infinity license. All standard reports are created using Crystal Reports.

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
General and Technical

4.17 - General and Technical				CIS Infinity		
Objective: To ensure that the application operates consistently and to the technical standards of the entities.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
181	Integration with all other application modules on the same processor for custom report creation	H	Y		CIS Infinity	
182	Flexible report formatting capabilities	H	Y		CIS Infinity	
183	Mailing list and label generation capability	H	Y		CIS Infinity	
184	Ability to retrieve information from multiple tables / files	H	Y		CIS Infinity	
185	Ability to specify desired subtotal breaks and totaling fields	H	Y		CIS Infinity	
186	Ability to obtain reports in different sort sequences	H	Y		CIS Infinity	
187	Ability to calculate percentages	H	Y		CIS Infinity	
188	Ability to calculate averages	H	Y		CIS Infinity	
189	Ability to perform arithmetic calculations	H	Y		CIS Infinity	
190	Ability to make minor alterations to <i>previously</i> defined reports.	H	Y		CIS Infinity	
191	Ability to prepare / print reports from any accounting period and across periods.	H	Y		CIS Infinity	
192	Ability to set up menus of created reports for easy access and printing	H	Y		CIS Infinity	
193	Option available to send report to the screen, a printer, or to a file.	H	Y		CIS Infinity	
194	Ability to select any account or range of accounts in the chart of accounts for inclusion in reports or exclusion	H	Y		CIS Infinity	
195	"Wildcard" and/or "Keyword" capability to allow easy accessing of a range of values when <i>creating</i> reports	H	Y		CIS Infinity	
196	Ability to quickly access a range or set of accounts for report creation by specifying a fund, utility and/or account type	H	Y		CIS Infinity	
197	Sequentially numbered pages on reports	H	Y		CIS Infinity	
198	Shows <i>current</i> date and reports "as of" date	H	Y		CIS Infinity	
199	Data fields include commas, decimal points, dollar signs, +/- signs, etc. and are right or left justified as appropriate	H	Y		CIS Infinity	
200	Ability to select any department (or cost center) or range(s) of departments (or cost centers) for inclusion or exclusion in/from reports	H	Y		CIS Infinity	
201	Ability to "drill down" allowing a user to begin with a summary level screen / online report and inquire on progressively more detailed (i.e., source) transactions.	H	Y		CIS Infinity	
202	Ability to provide a simple, easy drill down / drill around – with minimal keystrokes.	M	Y		CIS Infinity	
203	Ability to output electronically (file or diskette) to all governmental entities as required by law.	H	Y		CIS Infinity	May require formatting to meet governmental requirements
204	Ability for reports to be scheduled to run (i.e. to PDF).	H	Y		CIS Infinity	
205	Ability to export all reports into properly formatted excel.	H	Y		CIS Infinity	
206	Ability to execute reports with an "as of" date.	M	Y		CIS Infinity	
207	Ability to allow end users to directly print reports and inquiry screens to printer, without cumbersome use of a "print queue".	H	Y		CIS Infinity	

City of Columbia, MO - Columbia Financial Enterprise Resource System
General and Technical

4.17 - General and Technical				CIS Infinity		
Objective: To ensure that the application operates consistently and to the technical standards of the entities.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
208	Ability to allow search criteria on reports to be not-exact matches, partials, or similar.	H	Y		CIS Infinity	
209	Ability to automatically route reports via a workflow.	M	Y		CIS Infinity	
210	Ability to print from the ERP screens.	H	Y		CIS Infinity	
211	Ability to provide system-wide search functionality for keyword search, across all master and transaction records, to assist with fulfilling open records requests.	H	Y		CIS Infinity	
212	Ability for system to allow users to perform inquiries and searches by any field available for data entry.	M	Y		CIS Infinity	
213	Ability to reprint reports, checks, or bills with restart capability when reports, checks, or bills being printed are interrupted.	H	Y		CIS Infinity	
214	Ability to print all reports to laser printers (in either portrait or landscape format)	H	Y		CIS Infinity	
215	Ability for system to provide report formats that are developed to maximize data available on a page while still being readable.	H	Y		CIS Infinity	
216	Ability to print Accounts Payable and Payroll checks to laser printers with signatures and MICR coding (with appropriate security measures in place).	H	N		CIS Infinity	Not applicable
217	Ability to allow formatted output to be matched to printer device characteristics without intervention by the user.	H	N		CIS Infinity	
218	Ability to provide utilities for the user to choose delivery of a print job to an appropriate printer.	H	Y		CIS Infinity	
219	Ability for a user to specify which printer will print a specific report.	H	Y		CIS Infinity	
220	Ability to print screen contents (format and data) of each display.	H	Y		CIS Infinity	
221	Ability to print inquiry and data entry screens directly to a printer from the data entry or inquiry screen.	H	Y		CIS Infinity	
222	Ability to access system via mobile devices.	H	Y		CIS Infinity	Optional: Infinity.Mobile for service orders.
223	System to provide the ability for reports to be configurable by users	M	Y		CIS Infinity	
224	System to provide "user-friendly" reporting functionality	M	Y		CIS Infinity	
225	System provides a "light" interface for use / deployment on a mobile device such as smartphone, tablet, or iPad.	M	N		CIS Infinity	Optional: iPhone app for customers to access bills/make payments etc. Extension of Infinity.Link, utility customer web self service application.

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

Advanced Utility Systems, a division of N. Harris Computer Corporation	
Code	Availability Definition
Y	Functionality is provided out of the box through the completion of a task associated with a routine configurable area that includes, but is not limited to, user-defined fields, delivered or configurable workflows, alerts or notifications, standard import/export, table driven setups and standard reports with no changes. These configuration areas will not be affected by a future upgrade. The proposed services include implementation and training on this functionality, unless specifically excluded in the Statement of Work, as part of the deployment of the solution.
R	Functionality is provided through reports generated using proposed Reporting Tools.
T	Functionality is provided by proposed third party functionality (i.e., third party is defined as a separate software vendor from the primary software vendor). The pricing of all third party products that provide this functionality MUST be included in the cost proposal.
M	Functionality is provided through customization to the application, including creation of a new workflow or development of a custom interface, that may have an impact on future upgradability.
F	Functionality is provided through a future release that is to be available within 1 year of the proposal response.
N	Functionality is not provided.

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
1	System Requirements					
2	System has the ability to search for customer information by customer id, location id, customer name, service address, phone number, driver license number, etc. For any non-numeric search, system will provide list of available choices for criteria being searched if an exact match is not found.	H	Y		CIS Infinity	Wildcards
3	System allows for search of accounts by parcel ID (PIN)	M	Y		CIS Infinity	
4	System provides utility account search with wildcards	H	Y		CIS Infinity	
5	System provides a customer overview screen displaying configurable customer information, including pending activity.	H	Y		CIS Infinity	
6	System provides ability to associate a landlord account with every account and provides tools to perform an automated rollback if a renter finals.	H	Y		CIS Infinity	
7	System provides functions to research account details and perform account adjustments	H	Y		CIS Infinity	
8	Retains and displays (system administer defined) multiple years of billing and collection history in 'Live' database.	H	Y		CIS Infinity	
9	System tracks utility read routes / sequences, including tracking of directions and meter location	H	Y		CIS Infinity	Directions not supported.
10	Ability to view a "Change History" of records changed by internal staff.	H	Y		CIS Infinity	
11	Credit card and draft debit – auto draft available for all Utility Billing services	H	Y		CIS Infinity	Requires integration with third payment processor. PA-DSS Certified.
12	System provides e-payment and web customer account services/tools	H	Y		Infinity.Link	
13	System provides graphic display of usage history per account	H	Y		CIS Infinity	
14	System provides the average usage per account based on a user configurable time frame	H	Y		CIS Infinity	
15	System provides ability to perform "what if" billing calculations scenarios	H	Y		CIS Infinity	In test system

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing

CIS Infinity

Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.

Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
16	System provides tools to assess late charges and provides the related customer correspondence via phone calls, email or written notice	H	Y		CIS Infinity	
17	Ability to attach images to an account	H	Y		CIS Infinity	
18	Ability to track all meters by coordinates	H	Y		CIS Infinity	
19	Ability to create an intuitive and simplified billing calendar based on global system control setup	H	Y		CIS Infinity	
20	Ability to have a environment to test rate increases and adjustments	H	Y		CIS Infinity	
21	Ability to have a credit history indicator	H	Y		CIS Infinity	
22	Ability to track rebate history by location and/or customer	H	Y		CIS Infinity	
23	System provides multiple user defined fields/codes that are searchable and reportable	H	Y		CIS Infinity	
24	User friendly configurable dashboard	M	Y		CIS Infinity	Seven predefined KPI widgets.
25	Account Set-Up					
26	Maintains utility account master file information in a relational database, including:	-			CIS Infinity	
27	User Defined Account Number set up with the ability to automatically assign the next available number for new accounts based on cycle and route.	H	Y		CIS Infinity	Cycle
28	Name and Address (both service and billing for owner and renter) follow USPS standard	H	Y		CIS Infinity	
29	Multiple contact phone numbers	H	Y		CIS Infinity	
30	E-mail address	H	Y		CIS Infinity	
31	Customer type (residential, commercial, multi-family, mixed residential & commercial or others user configurable based on service, etc.)	H	Y		CIS Infinity	
32	Cycle (at least three digits in length: has 16 cycles and each has 7 routes)	H	Y		CIS Infinity	
33	Route (at least three digits in length)	H	Y		CIS Infinity	
34	Meter Reading Sequence Number (5 digits numeric minimum)	H	Y		CIS Infinity	
35	Account status (active, inactive, off for non-payment, being finaled, write-off, etc.)	H	Y		CIS Infinity	
36	Water Services: residential water, commercial water, irrigation, backflow, etc. with ability to add additional services	H	Y		CIS Infinity	
37	Stormwater: Ability to bill to a parcel or an address	H	Y		CIS Infinity	
38	Sewer Services: residential sewer, commercial sewer, etc. with ability to add additional services	H	Y		CIS Infinity	

Priority
H - High | M - Medium | L - Low

Availability
Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing

CIS Infinity

Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.

Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
39	Electric Services: Residential non electric heat with load mgmt switch; Residential non electric heat with NO load mgmt switch; Residential electric heat with load mgmt switch; Residential electric heat with NO load mgmt switch; Small commercial accounts: Street lights; etc. with ability to add additional services	H	Y		CIS Infinity	
40	Refuse and Solid Waste: Refuse residential , Refuse commercial; Recycling; Solid waste, etc. with ability to add additional services	H	Y		CIS Infinity	
41	Other: miscellaneous flat rate charges (i.e. trash out early, shut off, etc.) Safe Drinking Water Fee; State Sanitary Sewer Permit Fee, etc. with ability to add additional services	H	Y		CIS Infinity	
42	Allow for sewer billing based upon water usage, number of fixtures or flat rate codes	H	Y		CIS Infinity	
43	Number of Units (stores, apts., etc.)	H	Y		CIS Infinity	
44	Past Due Notice override with proper authorization	H	Y		CIS Infinity	
45	Shut Off Notice override with proper authorization	H	Y		CIS Infinity	
46	Final bill indicator	H	Y		CIS Infinity	
47	Installation date by service	H	Y		CIS Infinity	
48	Customer Initiation Date	H	Y		CIS Infinity	
49	Service Initiation Date (when individual service is activated allowing multiple initiation dates per service)	H	Y		CIS Infinity	
50	Billing History	H	Y		CIS Infinity	
51	Consumption/usage history by meter	H	Y		CIS Infinity	
52	Adjustment history	H	Y		CIS Infinity	
53	Payment/collection history	H	Y		CIS Infinity	
54	EFT Bank Account & ABA Routing Number	H	Y		CIS Infinity	
55	EFT Start/Stop Dates	H	Y		CIS Infinity	
56	EFT Bank Account Type	H	Y		CIS Infinity	
57	Tax ID/Parcel Number/PCN	M	Y		CIS Infinity	
58	Taxable Status	H	Y		CIS Infinity	
59	Business Type	H	Y		CIS Infinity	
60	Masked/redacted social security numbers (encrypted & stored in database)	H	Y		CIS Infinity	
61	Amount Due/Received	H	Y		CIS Infinity	
62	Comments/Notes (unlimited)	H	Y		CIS Infinity	
63	Rate Codes by service	H	Y		CIS Infinity	
64	Read Date	H	Y		CIS Infinity	
65	Current/Last read	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
66	Billing specific comments and notes	H	Y		CIS Infinity	
67	Alternate and/or seasonal addresses	H	Y		CIS Infinity	
68	Type of dwelling (house, apt, rental, duplex, etc.)	H	Y		CIS Infinity	
69	Rental unit identifier	H	Y		CIS Infinity	
70	Jurisdiction	H	Y		CIS Infinity	
71	Heat source	H	Y		CIS Infinity	
72	Load management switch installed indicator	H	Y		CIS Infinity	
73	Load shed/reduce agreement indicator	H	Y		CIS Infinity	
74	Group (to designate individual bills to a "Master Account Bill")	H	Y		CIS Infinity	
75	Type of Rebate(s) Received (multiple available, need separate field for each)	H	Y		CIS Infinity	
76	Amount of Rebate Received (multiple available, need separate field for each)	H	Y		CIS Infinity	
77	Voluntary contribution program(s) designation	H	Y		CIS Infinity	
78	Ability to enter new customer information into the system and pre-print out the application form with entered information for the customer to sign that includes all associated charges.	H	Y		CIS Infinity	
79	Delineates tenant-landlord relationship. Allows user to specify who receives the bill and who is responsible for delinquencies.	H	Y		CIS Infinity	
80	Ability to reinstate an inactive account.	H	Y		CIS Infinity	
81	Ability to maintain inactive accounts for a user-defined period of time before purging from the system.	H	Y		CIS Infinity	
82	Ability to retain inactive account information, including meter information	H	Y		CIS Infinity	
83	Ability to change account status to 'shut off' and continue billing charges	H	Y		CIS Infinity	
84	Ability to inactive all services at once when an account is being closed out rather than having to close each service individually.	M	Y		CIS Infinity	
85	Allows the addition and reassignment of cycles and routes without affecting the customer or location identification numbers.	H	Y		CIS Infinity	
86	System provides a customer master screen, with the ability to display multiple utility accounts and multiple addresses per customer account.	H	Y		CIS Infinity	
87	Ability to accept international mailing address formats	H	Y		CIS Infinity	
88	System provides tools to allow for batch creation of accounts	H	Y		CIS Infinity	
89	System provides tools to allow for batch edits to accounts	H	Y		CIS Infinity	For selected fields
90	Provides for mass changes to accounts due to the deletion of a cycle, the merging of existing cycles, or moving a sub-segment of a cycle to another.	H	Y		CIS Infinity	
91	Allow for mass changes for selected master file fields and location services	H	Y		CIS Infinity	
92	Ability to split customer accounts	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing			CIS Infinity			
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
93	System provides a workflow/wizard during account set up confirming all appropriate steps have been completed	H	Y		CIS Infinity	
94	Deposits					
95	System provides the ability to apply security deposits to accounts after meeting user defined criteria (based on payment activity, when the customer closes the account, after 5 years of excellent payment history, etc.).	H	Y		CIS Infinity	
96	System will print a detailed receipt for customer deposits.	M	Y		CIS Infinity	
97	Ability to set up multiple deposit types (tenants vs. owners) & rates	H	Y		CIS Infinity	
98	Ability to track when the deposit was collected	H	Y		CIS Infinity	
99	Ability to calculate a deposit based on historical consumption averages and meter size at location.	L	Y		CIS Infinity	
100	Ability to calculate a deposit based on customer payment or credit history.	H	Y		CIS Infinity	
101	Ability to calculate an additional deposit on an account based on customer payment history or user defined parameters.	H	Y		CIS Infinity	
102	Ability to calculate a deposit on system identified rental units.	L	Y		CIS Infinity	
103	Ability to record non-cash deposits (i.e. bonds)	H	Y		CIS Infinity	
104	Rate Set Up					
105	Configurable multi-component based with the ability to handle seasonal rate changes and tier structure including time of use and real time rates	H	Y		CIS Infinity	
106	Various tiered consumption rates based on customer type (residential, commercial, small commercial, industrial)	H	Y		CIS Infinity	
107	Monthly base/flat rate service charge base plus consumption	H	Y		CIS Infinity	
108	Ability to calculate a new electric ratchet charge based on the prior summer demand history in the last 11 months, or user defined time frame.	H	Y		CIS Infinity	
109	Tiered rates based on a user defined winter quarter's average	H	Y		CIS Infinity	
110	Ability to calculate a base consumption amount that rates are calculated off of	H	Y		CIS Infinity	
111	Sewer: Ability to take 5 months of actual reads, drop off the highest read & lowest read and bill on the average of the three reads left and if higher than a user defined minimum bill that usage. If lower than the minimum then will average a user defined number of months (usually 12) of actual reads and bill on that amount for the sewer.	H	Y		CIS Infinity	
112	Ability to have net metering (two meters one recording inflow (of solar power) & other outflow)	H	Y		CIS Infinity	
113	Ability for the rates to automatically change with the season based on user defined months of the season parameters.	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

5 of 20

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
114	Ability for rates to prorate consumption charges across season change (summer & non summer) based on 30 days or a definable usage month.	H	Y		CIS Infinity	
115	Proration of flat rate charges	H	Y		CIS Infinity	
116	Flat rate per impervious area (storm water)	H	Y		CIS Infinity	
117	Flat rate based on meter size	H	Y		CIS Infinity	
118	Multiple phased meters (for electric)	H	Y		CIS Infinity	
119	Multiple rates based on time of day (for electric)	H	Y		CIS Infinity	
120	Fire Suppression Systems or Meters	H	Y		CIS Infinity	
121	Irrigation Metering	H	Y		CIS Infinity	
122	Hydrant Meter	H	Y		CIS Infinity	
123	Stormwater - flat rate based on sq. ft. of 1st floor; BASED ON IMPERVIOUS AREA	H	Y		CIS Infinity	
124	Refuse - flat rate based on size of container & frequency DAY OF THE WEEK	H	Y		CIS Infinity	
125	Recycling - flat rate based on size x # of units	H	Y		CIS Infinity	
126	Yard Waste - flat rate x # of units	H	Y		CIS Infinity	
127	Disposal Fees -	H	Y		CIS Infinity	
128	Payment in Lieu of Tax (PILOT) (applied against the consumption)	H	Y		CIS Infinity	
129	Sales Tax (billed at multiple sales tax rates)	H	Y		CIS Infinity	
130	Sales Tax Exemptions (Governmental, Hotel, etc.)	H	Y		CIS Infinity	
131	User Defined Miscellaneous Fees (i.e. turn off, turn on, nsf, tampering, etc.)	H	Y		CIS Infinity	
132	Late Payment Penalty	H	Y		CIS Infinity	
133	Monthly Interest after 90 days	L	Y		CIS Infinity	
134	Discount percentages (if agree to load management or if meter is before or after the transformer could have loss between meter & transformer)	H	Y		CIS Infinity	
135	Allows for different charge methods for each user-defined service charge type:	-			CIS Infinity	
136	Flat charge	H	Y		CIS Infinity	
137	Multiplier based on meter definition or user defined multiplier	H	Y		CIS Infinity	
138	Multi-tiered based on user defined values BLOCK RATES	H	Y		CIS Infinity	
139	Seasonal rates for water and electric	H	Y		CIS Infinity	
140	Multiplier based on number of units	H	Y		CIS Infinity	
141	Provides multiple tiered rate schedules based upon service type, customer class (residential/commercial) and meter size.	H	Y		CIS Infinity	
142	System supports component billing capable of supporting multiple charge types, each with a different rate	H	Y		CIS Infinity	
143	Ability to add, delete, or suspend (for a user-defined time period) and itemize service charges and/or any miscellaneous fees to a utility bill.	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
144	Ability to create, edit and revise rate tables, tracking history of prior rate tables.	H	Y		CIS Infinity	
145	Ability to determine and track which services (i.e. water & base charges only) will have a surcharge	H	Y		CIS Infinity	
146	Ability to determine and track which services will have a sales tax or PILOT	H	Y		CIS Infinity	
147	Ability to have the utility tax charge go to a unique revenue account in GL rather than grouping this with the service that is being taxed.	H	Y		CIS Infinity	
148	Ability to have the surcharge go to a unique revenue account in the GL rather than grouping this with the service that is being surcharged.	H	Y		CIS Infinity	
149	Ability to have each component charge to go to a different revenue account	H	Y		CIS Infinity	
150	Ability to set dates when new rates become effective	H	Y		CIS Infinity	
151	Meters					
152	Ability to have multiple meters accounts associated with the same address.	H	Y		CIS Infinity	
153	Ability to have multiple address per meter	H	Y		CIS Infinity	
154	Ability to have location history per meter (i.e. tracking when a meter moves from one location to another)	H	Y		CIS Infinity	
155	Ability to create / update Meter numbers.	H	Y		CIS Infinity	
156	Ability to add / delete meters in mass or range	H	Y		CIS Infinity	
157	System tracks the following for installed meters:	-			CIS infinity	
158	Meter size	H	Y		CIS Infinity	
159	Meter type	H	Y		CIS Infinity	
160	Meter Reader Instructions (32 characters minimum)	H	Y		CIS infinity	
161	Meter Number (with ability to assign multiple meters per account)	H	Y		CIS Infinity	
162	Remote Location Description (unlimited)	H	Y		CIS Infinity	
163	Longitude & Latitude	M	Y		CIS Infinity	
164	Meter/Remote ID Number	H	Y		CIS Infinity	
165	Meter Serial Number	H	Y		CIS infinity	
166	Meter number of dials (minimum of 8)	H	Y		CIS Infinity	
167	active / inactive / retired / in stock	H	Y		CIS Infinity	
168	installed date	H	Y		CIS Infinity	
169	age (calculated based on installed date)	H	Y		CIS infinity	
170	date meter pulled out of service	H	Y		CIS infinity	
171	automated meter reading device attached?	H	Y		CIS infinity	
172	associated meter device	H	Y		CIS infinity	
173	Read Date	H	Y		CIS Infinity	
174	Current Read	H	Y		CIS Infinity	
175	Last Read	H	Y		CIS Infinity	
176	Capability to support compound meters.	L	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
177	System provides ability to combine meters for consolidated billing	H	Y		CIS Infinity	
178	Allows inquiry to meter history by meter number, remote ID number, account number service address or latitude/longitude.	H	Y		CIS Infinity	
179	Billing					
180	Capability to prompt meter reading entry by displaying customer accounts in user defined sequence	H	Y		CIS Infinity	
181	Ability to automatically generate meter estimates (based on a change that has occurred in a prior cycle) and report on the estimates	H	Y		CIS Infinity	
182	System provides the ability to establish billing cycle records with month / year; bill distribution date; bill due date and delinquency date.	H	Y		CIS Infinity	
183	Estimates a utility bill based on criteria established by the Municipality (i.e.: on the average consumption over a user defined number of months or cycles, or using last year's actual for the same period) and shows "Estimate" on the customer's bill.	H	Y		CIS Infinity	
184	Ability for the system to estimate on historical consumption	H	Y		CIS Infinity	
185	Ability for a user to enter a manual estimate.	H	Y		CIS Infinity	
186	Capability of automatically applying certain misc. charges of varying amounts against selected accounts.	H	Y		CIS Infinity	
187	Ability to handle meter readings up to 8 significant digits.	H	Y		CIS Infinity	
188	Ability to calculate a credit when previous estimate was more than the actual consumption.	H	Y		CIS Infinity	
189	Ability to process seasonal billings (i.e. filling stations) and put on the regular bill	H	Y		CIS Infinity	
190	System has the ability to change a read and individually rebill or recalculate the bill. In essence, cancel and rebill accounts.	H	Y		CIS Infinity	
191	Ability to create surcharge services based on account jurisdiction	H	Y		CIS Infinity	
192	System provides a mechanism for "holding" bills that are flagged as outside of the Municipality's user-defined exception criteria for billing without disrupting the rest of the billing. Then having the ability to bill at any time after exceptions have been verified/resolved.	H	Y		CIS Infinity	
193	System provides a Billing Exception Report that alerts for consumptions that fall outside of the Municipality's user defined exception criteria. Report should include meter info, current and past consumptions, new and previous readings, days between readings, customer account number, meter reader information, and average consumption per customer with expected high/low usage based on average.	H	Y		CIS Infinity	
194	System provides reports by service: no bill, unbilled, rules to flag and identify, validation	H	Y		CIS Infinity	
195	System tracks revenue by rate class	H	Y		CIS Infinity	
196	System provides a list that details accounts that have an actual read for the current billing cycle and an estimated read the prior billing cycle.	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing

CIS Infinity

Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.

Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
197	System provides the ability to post updates to accounts with new billing information before bills are generated (e.g., amount due, reads, dates, etc.).	H	Y		CIS Infinity	
198	Ability to remove a customer record from calculated billing file	H	Y		CIS Infinity	
199	Ability to apply credit and debit adjustments and positive / negative consumption adjustments to accounts anytime during the billing cycle.	H	Y		CIS Infinity	
200	Adjustments report displays adjustment details including dollar amount, consumption volume (gallons/cubic ft.) and rate/service code.	H	Y		CIS Infinity	
201	Ability to add additional charges (i.e. a non-payment charge) to the current bill during the billing process.	H	Y		CIS Infinity	
202	Provides the ability to enter adjustments to customer accounts (dollar amounts and/or consumption used) and reprint single billing statements reflecting the adjustments made.	H	Y		CIS Infinity	
203	Ability to edit reads at any time, before, during, or after billing with audit trail capabilities.	H	Y		CIS Infinity	
204	Ability to prorate charges for partial billing due to initiation or termination of accounts.	H	Y		CIS Infinity	
205	Capability to print previous period/last year's comparative period consumption and current period consumption on each bill.	M	Y		CIS Infinity	
206	Ability to bill various services/charges at differing frequencies (i.e.: monthly, bimonthly, semi-annually or annually).	M	Y		CIS Infinity	
207	Bills can be based on multiple components (consumption + flat meter charge per meter size and administrative charge per billing cycle prorated for number of days).	H	Y		CIS Infinity	
208	Ability to calculate and print all bills due in a given month, within a single cycle or for all cycles.	H	Y		CIS Infinity	
209	System provides ability for the Municipality to prorate mid-cycle rate increases for existing billable services.	M	Y		CIS Infinity	
210	System provides tools for flagging accounts for sorting associated printed bills as "Pulled" for review by staff before exporting the billing file to the printer	H	Y		CIS Infinity	
211	Ability to hold printing of the bill for a specific customer for the current billing cycle or specified length of time	H	Y		CIS Infinity	
212	System provides automated bill runs based on pre-defined billing date and allows for ability to generate a bill on demand	H	Y		CIS Infinity	
213	System provides ability to bill storm water services, trash and miscellaneous charges separately for owner versus renter at same location (separate bills).	H	Y		CIS Infinity	
214	Ability to change the bill date and/or due date in mass if error was made during the bill calculation	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
215	Ability to bill internal departments for all utility services and other miscellaneous work performed.	H	Y		CIS Infinity	
216	Ability to allocate inter-departmental billing to multiple general ledger accounts at user defined percentages	H	Y		CIS Infinity	
217	Ability to provide budget billing which would calculate a set amount per billing period per service based on a set of user defined usage parameters.	H	Y		CIS Infinity	
218	Ability to bill customers for sales tax on water & electric sales, apply and track all exemptions from sales tax in compliance with Missouri sales tax law	H	Y		CIS Infinity	
219	Printing of the Bills					
220	System allows for creation of a customizable utility bill format that includes graphics	M	Y		CIS Infinity	
221	Ability to print a user defined number of months of usage history in a graphic display	M	Y		CIS Infinity	
222	Ability to generate bills capable of being read via Optical Character Recognition OCR and barcode. Information must include:	-	Y		CIS Infinity	
223	Account #	H	Y		CIS Infinity	
224	Check digit (verification that account was read properly)	H	Y		CIS Infinity	
225	Bill Amount	H	Y		CIS Infinity	
226	Ability to export a file of utility bills to an external bill printing organization (i.e. 3rd party billing services).	H	Y		CIS Infinity	
227	Uses Zip+4 software for sorting of utility bills by zip code to obtain the best postal rate possible.	H	Y		CIS Infinity	Standard intrface to Melissa Mailers +4
228	System provides the ability to reprint bills.	H	Y		CIS Infinity	
229	Ability to email bills (original, re-bills or reprints) to customers when requested.	H	Y		CIS Infinity	
230	System accommodates multiple dates (due and delinquent) per customer bill	H	Y		CIS Infinity	
231	Capability to include total past due on the bills.	H	Y		CIS Infinity	
232	Ability to provide general system messages and account specific messages for printing on bills with the ability to modify those messages for each bill run after bill generation but before exporting to third party printer.	H	Y		CIS Infinity	
233	For accounts that are paying via ACH or recurring credit card, still generate a bill with a message but also indicate that they do not need to pay, due to auto pay.	H	Y		CIS Infinity	
234	Ability to print on multiple bill formats (i.e. post card, 8.5 x 11, etc.)	L	Y		CIS Infinity	
235	Ability to have larger font sizes for bill printing on flagged customers (seniors & sight impaired customers)	H	Y		CIS Infinity	

Priority
H - High | M - Medium | L - Low

Availability
Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
236	Ability to automatically group individual accounts on a "Master Account Bill" when printing the bill.	H	Y		CIS Infinity	
237	Ability to recreate an image of each customer's historical bill on request.	H	Y		CIS Infinity	
238	Utility Receipting					
239	System accommodates the following payment types for utility payments and applications, either via the utility system or a separate Cash Receipting system which is integrated to the utility system:	-			CIS Infinity	
240	Cash	H	Y		CIS Infinity	
241	Check	H	Y		CIS Infinity	
242	EFT/ACH	H	Y		CIS Infinity	
243	Credit Card Payments	H	Y		CIS Infinity	Requires 3rd party payment merchant
244	Credit/Debit Card Payments taken over the Internet or phone.	H	Y		CIS Infinity	Requires 3rd party payment merchant
245	File import from 3rd party payment organization (i.e. lock box, ACH, etc.)	H	Y		CIS Infinity	
246	TVR transactions	H	Y		CIS Infinity	Requires 3rd party payment merchant
247	Ability to indicate date/time payment was received for penalty calculations.	H	Y		CIS Infinity	
248	Ability to choose a payment date when using auto pay / ACH	M	Y		CIS Infinity	
249	System provides the ability to generate a receipt with payments for multiple accounts. The printed receipt should show the detail of each account.	H	Y		CIS Infinity	
250	Capability to accept more than one payment in a single day from a single customer.	H	Y		CIS Infinity	
251	Automatically creates a journal entry and will update the General Ledger after accounting approval step is performed.	H	Y		CIS Infinity	
252	Automatically splits total receipted amount to appropriate General Ledger account.	H	Y		CIS Infinity	
253	Ability to post cash receipts to utility billing module automatically from multiple terminals without interfering with other utility transactions.	H	Y		CIS Infinity	
254	System provides the capability to set the priority for payment application based on each type of service (posting priority).	H	Y		CIS Infinity	
255	System provides functionality to define proration of partial payments against various charge types.	H	Y		CIS Infinity	
256	Ability to automatically distribute receipt of payments against the individual accounts on a "Master Account Bill" when payments are received.	M	Y		CIS Infinity	
257	Allows for credit balances, but does not apply penalties to such balances.	H	Y		CIS Infinity	
258	Reverses payment for invalid payments and optionally assesses a user-defined NSF charge.	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
259	System provides the ability to fix accounts and adjust accounts by allowing for transfer of payments between accounts before and/or after a payment has been posted.	H	Y		CIS Infinity	
260	Ability to zero out credit balances for specific payment types (i.e. net metering which accumulates credits but at the end of the year needs to revert to 0)	H	Y		CIS Infinity	
261	Final Notice					
262	Generates final bill, once the date and final read is entered, at any point during the billing cycle.	H	Y		CIS Infinity	
263	Penalties/Interest					
264	Ability to automatically charge interest (percentage) on the delinquent balance (every month an interest charge is accrued)	H	Y		CIS Infinity	
265	Ability to override and/or credit penalty.	H	Y		CIS Infinity	
266	Ability for system to not apply a penalty to those customers that are current on their payment plans.	H	Y		CIS Infinity	
267	Ability to designate which charges are subject to penalty and/or interest	H	Y		CIS Infinity	
268	Ability to extend the number of days before an account is past due and/or penalty applied on specific accounts in account set up.	H	Y		CIS Infinity	
269	Delinquent/Past Due Notices/shut offs					
270	Ability to print delinquent/past due notices to customers. These are generated based on user defined minimum (based on a single past due bill and/or balance due) and number of days after payment was due, including applicable penalty amounts added.	H	Y		CIS Infinity	
271	Ability to automatically create a service order when the cut/shut-off criteria is met.	H	Y		CIS Infinity	
272	Ability to automatically apply a cut/shut off charge to the customer balance based on customer type when the cut/shut off user defined criteria is met.	H	Y		CIS Infinity	
273	Ability to automatically apply a reconnect charge to the customer based on customer type when the reconnect defined criteria is met.	H	Y		CIS Infinity	
274	Ability to send the delinquent files to a third party for collection	H	Y		CIS Infinity	
275	Ability to generate a shut/cut off report with customer address information, notes, and balance due for field crews on a hand held device.	H	Y		CIS Infinity	
276	System provides the ability to send delinquent/past due and cut off notices to the landlord if a tenant is responsible for the bill, and the landlord would like to be informed of non-payment.	H	Y		CIS Infinity	
277	Ability to automatically generate a delinquent/past due notice for multiple addresses (mailing, service, landlord, etc.).	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
278	Optionally, be able to override the generation of the delinquent/past due notice with proper authority and reporting.	H	Y		CIS Infinity	
279	Ability for the delinquent notices to be driven off of the billing date	H	Y		CIS Infinity	
280	Ability to assign due dates to specific customers	H	Y		CIS Infinity	
281	Ability to recreate an image of the actual shut-off notice that the customer received when requested.	H	Y		CIS Infinity	
282	Payment Plans/Agreements					
283	Ability to process user-defined payment arrangements (i.e. payment plans) and flag if payments are not being met.	H	Y		CIS Infinity	
284	Customer Payment Plan Report - show summary of all payment plans that are delinquent, and the ability to generate delinquent payment plan letters as per user defined criteria.	H	Y		CIS Infinity	
285	Ability to request a payment plan from a customer web portal	M	F		CIS Infinity	
286	Ability for the payment agreement to override the calculated bill and print the correct amount due based on the agreement and due date as well as the total amount due.	M	Y		CIS Infinity	
287	Bankruptcy/foreclosure					
288	Ability to support bankruptcy/foreclosure processing that tracks pre-petition and post-petition information.	M	Y		CIS Infinity	
289	Lien Process					
290	Ability to support lien processing	H	Y		CIS Infinity	
291	Ability to put a lien on a property based on user defined balance amounts and due dates per service	H	Y		CIS Infinity	
292	Ability to add additional charges when a lien is placed	H	Y		CIS Infinity	
293	Ability to have multiple liens on a single property owner	H	Y		CIS Infinity	
294	Ability to send an email or letter to a property owner when a property will be placed on lien based on user defined date parameters.	H	Y		CIS Infinity	
295	Ability for the system to automatically print a claim of lien form when a property is liened and a release/satisfaction of lien form when it is paid	H	Y		CIS Infinity	
296	Ability to download a list of customer liens (customer information and amounts per service).	H	Y		CIS Infinity	
297	Write Offs					
298	Ability to perform write off processing for accounts finaled and uncollectable based on the final date	H	Y		CIS Infinity	
299	Ability to report customers that have outstanding transactions/bills that are based on a user defined date.	H	Y		CIS Infinity	
300	Ability to automatically write off balances (i.e. not entering adjustments one by one) in mass (based on a date) and have it update the GL correctly.	H	Y		CIS Infinity	
301	Utility Service/Work Orders					

Priority
H - High | M - Medium | L - Low

Availability
Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing

CIS Infinity

Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.

Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
302	System provides functionality to manage utility service orders associated with the utility customer account	H	Y		CIS Infinity	
303	System has ability to enter customer account information and identify the related necessary service order activities:	-			CIS Infinity	
304	New Account	H	Y		CIS Infinity	
305	Cut/Shut offs	H	Y		CIS Infinity	
306	Special reads	H	Y		CIS Infinity	
307	Change or repair meter	H	Y		CIS Infinity	
308	Unusual Consumption check	H	Y		CIS Infinity	
309	Final reads	H	Y		CIS Infinity	
310	Unlimited user defined types	H	Y		CIS Infinity	
311	Ability to record results of meter inspections into the system.	H	Y		CIS Infinity	
312	Ability to store meter maintenance information.	H	Y		CIS Infinity	
313	Provides user-defined service order types.	H	Y		CIS Infinity	
314	System provides a central utility accounts with service order workflow to various Municipality staff based on customer's services.	H	Y		CIS Infinity	
315	Automatically creates service orders and manages scheduled, in-progress, and completed service orders.	H	Y		CIS Infinity	
316	Configurable listing of meter related information that can be designated as part of the service order.	H	Y		CIS Infinity	
317	Ability to mass enter meter reading and automatically close work orders during high volume of turnover (student rush - college move in/out)	H	Y		CIS Infinity	
318	Automatically prompts service order generation based on input from meter readers and automated meter reader error codes.	H	Y		CIS Infinity	
319	Ability to generate an automatic cut/shut-off service order, as defined by user, based on the cut/shut-off report.	H	Y		CIS Infinity	
320	Accesses and displays service order at any time regardless of status.	H	Y		CIS Infinity	
321	Automatically produces service orders containing information such as request date, person or department initiating request, job type, due date and comments.	H	Y		CIS Infinity	
322	Ability to inquire on all outstanding service orders. Provides the flexibility to list information by job type, request date or due date.	H	Y		CIS Infinity	
323	Ability to apply multiple miscellaneous charges to a single service order	H	Y		CIS Infinity	
324	When a payment is entered or imported, ability to compare it against all customers with a shutoff status and automatically create a service/work order to turn the meter back on.	H	Y		CIS Infinity	
325	Ability to consolidate all service orders for the same service address due on same day	M	N		CIS Infinity	
326	Voluntary Contribution Management					

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
327	Ability to track donor demographic information (name, address, etc.)	H	Y		CIS Infinity	
328	Ability to have user defined programs for contributions	H	Y		CIS Infinity	
329	Ability to designate a contribution to multiple programs	H	Y		CIS Infinity	
330	Ability to track the dates and amounts of the dollars coming in and dollars being distributed	H	Y		CIS Infinity	
331	Ability to report on contribution activity in detail and summary	H	Y		CIS Infinity	
332	Ability to set a minimum contribution amount	H	Y		CIS Infinity	
333	Analysis / Forecasting					
334	Ability to perform "what if" analysis/forecasting without impacting the data in the LIVE system.	H	Y		CIS Infinity	In test system
335	Ability to perform a "what if" analysis:	-			CIS Infinity	In test system
336	utilizing current rate information vs. proposed rate information	H	Y		CIS Infinity	
337	utilizing current consumption information	H	Y		CIS Infinity	
338	in a trial mode, prior to any updates to actual data,	H	Y		CIS Infinity	
339	save analyses to a separate file (i.e. exporting to Excel) or print out analysis,	H	Y		CIS Infinity	
340	on individual accounts and view the results at the account or department level.	H	Y		CIS Infinity	
341	allowing the user to adjust the rates on a configurable basis (i.e. amount, percent, etc.) for a particular service, customer type (commercial, residential, etc.), billing cycle, and/or route.	H	Y		CIS Infinity	
342	Ability to analyze KW consumption per customer for a user defined period of time (i.e. June - Sept.) and only report those customers who used a minimum amount per month (250 kw)	H	Y		CIS Infinity	
343	Ability to set multiple user defined from/to date parameters where customer energy efficiency improvements occurred to track and compare usage history	H	Y		CIS Infinity	
344	Ability to export user defined consumption/usage data for analysis	H	Y		CIS Infinity	
345	Principal Reports					
346	User friendly configurable systems with results exportable to Excel or other formats	H	Y		CIS Infinity	
347	Meter Size Report that identifies the number of meters by size.	H	Y		CIS Infinity	
348	Arrears Register All Cycles that shows the balances for 30, 60, 90 and 120+ on all accounts as of a user defined date.	H	Y		CIS Infinity	
349	Area Maintenance Meter Report that shows the customers and numbers that have irrigation meters.	H	Y		CIS Infinity	
350	Commercial Customer Report.	H	Y		CIS Infinity	
351	Inactive Account Report that lists all inactive accounts with account balances and ability to choose only account with balances other than 0.	H	Y		CIS Infinity	
352	Notes Report that shows the individual and group messages that will be displayed on the bills.	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

15 of 20

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System

Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
353	Customer Count Report that provides the number of customers by cycle, specific category(residential/commercial) and service (water, sewer, garbage).	H	Y		CIS Infinity	
354	Final Bill Listing Report.	H	Y		CIS Infinity	
355	Cycle Report, details an individual cycle, route and displays high balances.	H	Y		CIS Infinity	
356	Customer Report, details information regarding customer's account, name, address, account number, meter info, reads, rate codes, transaction history	H	Y		CIS Infinity	
357	Top 25 Users Report, detailing highest consumption accounts or highest consumption customers, providing account and usage information	H	Y		CIS Infinity	
358	Account Adjustment Detail Report (Rate Codes, Consumption Amt, Dollar Amt, Consumption charges broken out)	H	Y		CIS Infinity	
359	Service Order Report - to show, by specified date or type, orders to be done	H	Y		CIS Infinity	
360	Service Order Completion History - to provide reporting on data entered for all fields (including user defined) in the completion of the service order.	H	Y		CIS Infinity	
361	Consumption Report, by account, showing utility usage over a user-specified time interval. Flags abnormal usage (high/low/negative, etc.). Report should include meter information, consumption, new and previous readings, days between readings, customer account number and meter reader information.	H	Y		CIS Infinity	
362	Summary/Totals by customer type (residential/commercial/multi-family) by jurisdiction giving the total number of accounts, consumption and dollars billed for a given time period.	H	Y		CIS Infinity	
363	Revenue detail by customer type (residential/commercial/multi-family) by jurisdiction for each service (water, stormwater, irrigation, garbage, etc.) including the utility tax/surcharge for a given time period reporting billed amount.	H	Y		CIS Infinity	
364	Ability to determine by jurisdiction any amount subject to utility tax and/or surcharge and any exempt amounts.	H	Y		CIS Infinity	
365	Payment History, reporting bills and associated payments receipted by account. Shows dates, amounts, arrearages, penalties, account name, consumption, and address. Can be run for one account and allow user to view.	H	R	\$2,250.00	CIS infinity	
366	Customer Statistics Report, presenting customer characteristics including number of customers, number of customers by meter size and billing category (customer type), usage and revenue by meter size, usage and revenue by billing type code, date range, district, book, and by a combination of the above.	H	R	\$4,500.00	CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
367	Customer Receivables Aging , presenting aging of user-defined criteria and / or general accounts receivable by customer indicating total amount due and amounts aged by 30, 60, 90 and 120+days, etc.	H	Y		CIS Infinity	
368	Cash Receipts Listing , reporting all amounts collected against customer accounts. Can be printed on demand with user-defined criteria prior to posting.	H	Y		CIS Infinity	
369	Cut/Shut Off Report , per cycle, showing accounts with one or more delinquent bills totaling over a user defined amount	H	Y		CIS Infinity	
370	Delinquent Notices Report , a listing generated based on user defined minimum and number of days after payment was due, including applicable penalty amounts added. Multiple types of notices capability (i.e. a first delinquent notice and a second delinquent notice with different parameters).	H	Y		CIS Infinity	
371	All master file information is accessible by the report writer.	H	Y		CIS Infinity	
372	Cut/Shut off Work/Service Orders .	H	Y		CIS Infinity	
373	Journal Entry Report , showing all J/E's over a user-defined period.	H	Y		CIS Infinity	
374	Billing Report , sorted on user-defined criteria, showing name, location address, current period charges by service, date billed, due date, readings, etc.	H	Y		CIS Infinity	
375	Outstanding Work Order Report , showing flags based on user-defined criteria	H	Y		CIS Infinity	
376	Billing Statistics (Rate Codes, Consumption Amt, Dollar Amt, Consumption & Demand charges broken out)	H	R	\$3,750.00	CIS Infinity	
377	Payment Detail (identify fund/account payment applied to)	H	Y		CIS Infinity	
378	Bill Calc (exception reporting of accounts to be billed)	H	Y		CIS Infinity	
379	Billing Register (dollar, by charge type and consumption detail of accounts to be billed)	H	Y		CIS Infinity	
380	Transaction Listing/Recap (for selected or all accounts for given date(s), and/or by transaction type).	H	Y		CIS Infinity	
381	Deposit on File report by date, printed the account status (active, final or closed/active)	H	Y		CIS Infinity	
382	Report: Security Deposits Refunded/Applied , with ability to run by specified date range.	H	Y		CIS Infinity	
383	Security Deposit activity for time period	H	Y		CIS Infinity	
384	Over Due Deposit Report	L	Y		CIS Infinity	
385	Surcharge billing & collection report	M	R	\$1,500.00	CIS Infinity	
386	System automatically generates a exception edit list when reads are applied to customer accounts (Meter Not Read Report).	H	Y		CIS Infinity	
387	Table Report (detail on services, rate codes, etc.) for given field	H	Y		CIS Infinity	
388	Audit Trail reports for all update processes	H	Y		CIS Infinity	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
389	Customer List and labels based on customer initiation date to mail out new-comer packages	H	Y		CIS Infinity	
390	Ability to report for sewer or water only accounts	H	Y		CIS Infinity	
391	Ability to report active and/or inactive ACH customers based on status	M	Y		CIS Infinity	
392	Ability to pull information based on any field in the application and produce a customized letter (i.e. past due letters, voluntary contribution letters, landlord letters, etc.)	H	Y		CIS Infinity	
393	Ability to send all letters to a third party for printing	H	Y		CIS Infinity	
394	Ability to report the percentage of consumption verses base charges for commercial water accounts	H	Y		CIS Infinity	
395	Ability to report on any residential customer who's summer usage is 80% of the 3 month average (for rate increase adjustments)	H	R	\$3,000.00	CIS Infinity	
396	Ability to export a list of all customers that have a particular service code (i.e. trash, recycling, etc.) which includes the customer number, name and number of units to reconcile the trash and recycle bag voucher process that is mailed quarterly.	H	Y		CIS Infinity	
397	System reports revenue by rate class	H	Y		CIS Infinity	
398	Ability to run reports that provide for Missouri sales tax reporting	H	Y		CIS Infinity	
399	Ability to run a report for receivable account balance by utility (water, electric, sewer, solid waste, storm water, contributions), and also by transaction type (cash receipts, billing, adjustments).	H	Y		CIS Infinity	
400	Interfaces/Integrations					
401	Ability to update G/L with journal entries made in utility billing after proper approvals.	H	Y	\$5,400.00	CIS Infinity	Interface required
402	Ability to "drill down" from G/L to detail utility billing transaction data	H	M	\$8,250.00	CIS Infinity	
403	Interfaces with Cash Receipting.	H	Y		CIS Infinity	Cost included on interface tab of Price Form
404	System is synchronized with Municipality's existing ESRI GIS architecture	H	Y		CIS Infinity	Cost included on interface tab of Price Form
405	Ability to view the refuse routes from GIS ALL UTILITIES	H	Y		CIS Infinity	Cost included on interface tab of Price Form
406	Ability to integrate with the Master Address Module	H	Y		CIS Infinity	As it relates to Utility addresses. See Master address responses.
407	Ability to integrate with other modules such as Accounts Receivable to consolidate bills for customers that have utility and non-utility charges	M	N		CIS Infinity	
408	Ability to integrate with the Housing Management module for energy efficiency loans	M	Y	\$7,500.00	CIS Infinity	Interface required
409	Ability to integrate with the Housing Management module to pull principal, interest and loan balance and print on the utility bill as separate lines	H	Y	\$9,000.00	CIS Infinity	Interface required

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
410	Ability to integrate with the Asset Management module for tracking and billing assets.	M	Y	\$11,250.00	CIS Infinity	Interface required
411	System integrates with Work Orders for any billing generated from the Work Order system (different than service orders within UB)	H	Y	\$13,500.00	CIS Infinity	Interface required
412	Ability to integrate with the Permits module and automatically update the heat source on the customer master account	M	Y	\$9,000.00	CIS Infinity	Interface required
413	Ability to interface with the postal service for address and move updates	M	Y		CIS Infinity	
414	Capability to interface with AMR systems to download routes to the PC and upload meter readings to the utility billing system.	H	Y		CIS Infinity	Configuration of standard batch meter reading interface.
415	Capability to interface with AMR systems to upload/download utility account information and changes to it (including directions, notes, description, meter location, route sequence)	H	Y		CIS Infinity	Configuration of standard batch meter reading interface.
416	Ability to upload the re-sequencing of routes from the AMR system to the Utility Billing system	H	Y		CIS Infinity	Configuration of standard batch meter reading interface.
417	Ability to import consumption from third party sources	M	Y		CIS Infinity	
418	System provides an integrated utility service order function that integrates to the utility customer account for customer service and charge/billing purposes	H	Y		CIS Infinity	
419	Ability to interface with OCR or bar code reading devices, including hand held scanners.	H	Y		CIS Infinity	Handled by interface between central cashiering software and OCR reader.
420	System allows for the import of electronic payment files from various sources (Please list the sources in the comments area)	H	Y		CIS Infinity	Configuration of any payment text file layout using Advanced Interface Manager (AIM) tool.
421	System integrates with the Customer Relationship Management (CRM) module for any citizen's request on UB service orders	H	Y	\$9,750.00	CIS Infinity	As part of interface to portal
422	System integrates with an IVR system	H	Y		CIS Infinity	
423	Ability to recognize the phone number of the customer and access the account directly for the following:	-	Y		CIS Infinity	As part on an IVR interface - Real time web services API
424	Payment updates	M	Y		CIS Infinity	
425	Phone notifications for high usage, high bill, return payments, delinquency, service order outcomes, receipt information, etc.	M	Y		CIS Infinity	Export files sent to IVR for outbound calling
426	Ability to integrate with a fixed base meter data collection system	M	Y		CIS Infinity	
427	Ability for field service personnel to access accounts for daily service via a web based tablet.	M	Y		CIS Infinity	Optional Infinity.Mobile
428	Ability for service orders to be sent to hand held devices for field workers	M	Y		CIS Infinity	
429	System integrates with the Municipality's web site to provide online functionality where customers (owners & tenants) can access information related to their account. Including:	-			Infinity.Link	
430	Consumption History	H	Y		Infinity.Link	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

City of Columbia, MO - Columbia Financial Enterprise Resource System
Utility Billing

4.32 - Utility Billing				CIS Infinity		
Objective: To streamline the utility billing and collection processes and to ensure accurate bill generation, to increase efficiency in customer service processes, editing data, preparing bills, etc. Provide enhanced capability in reconciliation of revenues and receivables, and to provide metrics in the analysis of usage patterns. Accommodates time of use and real time rate design and billing.						
Number	Application Requirements	Priority	Availability	Cost	Required Product(s)	Comments
431	Billing History	H	Y		Infinity.Link	
432	Payment History	H	Y		Infinity.Link	
433	Current Bill	H	Y		Infinity.Link	
434	Ability to pay online	H	Y		Infinity.Link	
435	Ability to view and update all of the account information	H	Y		Infinity.Link	Key account information
436	Ability to update the credit card information	L	Y		Infinity.Link	
437	Ability to request a payment plan	M	Y		Infinity.Link	
438	Ability to request a payment date	M	Y		Infinity.Link	
439	Ability to calculate a partial monthly bill	M	M	\$9,000.00	Infinity.Link	
440	Ability to flag account for email notifications	M	Y		Infinity.Link	
441	Ability to opt out of paper notifications & receive them electronically only	M	Y		Infinity.Link	

Priority

H - High | M - Medium | L - Low

Availability

Y - Yes | R - Reporting Tool | T - Third Party
M - Modification | F - Future | N - Not Available

8 Response to Technical Requirements

8.1 Technical Infrastructure

The Vendor shall provide the information described in this section. The information will be used in the evaluation process. Vendors should identify where conflicts may exist between their solution and current technologies being used in the City of Columbia as described in section 1.5.

In addition to providing responses to the following items, the Vendor must complete the **Technical Requirements Form** in section 6.6 of this RFP, and include it in this section of the response.

As the City of Columbia is contemplating a City of Columbia-hosted versus Vendor-hosted solution, aspects of the proposed solution to be provided should be clearly delineated where they vary between these two approaches in the sections below.

1. Hardware and Storage Environment

a. Describe the proposed computer hardware and storage environment to support the system. In the event that there are multiple computer systems available, list all options. Indicate which is the preferred hardware platform and why. List the conditions in which the preferred hardware platform would change. A hardware configuration, which takes into account the size of the City, application modules, database size, and anticipated growth, must be provided.

CIS Infinity supports Windows server 2000-2008 R2.

In terms of the backend database CIS Infinity operates with either MS SQL or Oracle.

CIS Infinity supports the following database versions:

Oracle 9i-11g

SQL 2005-2008 R2

Initial allocation for disk space is highly dependent on customer count and years of history. A ballpark figure of 30GB of database storage is a start. Annual growth is also variable, depending on billing frequency and other parameters, but a value of 2GB a year is a good working number. These figures can be fine-tuned with more detailed information on billing frequency, account growth, and complexity of billing calculations.

Hardware Recommendation

Application server configuration recommendation

General	
Configuration	Intel Xeon Dual Processor Server
Processor(s) (Intel)	
Processor (CPU)	Dual Xeon 3.2 GHz/4MB KB

	processor with 533 MHz system bus
Memory Standard	
Memory (RAM)	8GB DDR SDRAM
Network controller(s)	
Gigabit Ethernet NIC PCI	Dual Intel Pro 1000MT Single port copper gigabit network adapters. (10/100/1000)
Storage Controller(s)	
SCSI Controller	PERC4/Di 2 internal channels - embedded RAID 128MB cache
Storage	
Hard Drives (Universal Hot Plug)	Two 18 GB 10,000 rpm Ultra 320 SCSI (RAID 1) Three 73 GB 10,000 rpm Ultra 320 SCSI (RAID 5)
Backup	
External Backup Unit	SDLT 100 GB External Backup Unit
Industry Standards	
Approved certifications (preferred)	ACPI 2.0 PCI 2.2 PXE WOL Physical Address Extension (PAE) Support
Operating system	Microsoft Windows 2003 Server Enterprise Edition, or higher.

Database server configuration recommendation

Processors (CPU)	Intel Xeon quad processor or equivalent
# CPU	4+
Memory (RAM)	8+
Hard drives	SCSI or SATA
CD/DVD ROM drive	1
Network card	100MB+
Database server software (MS SQL server)	MSSQL server 2005, or 2008 Standard/enterprise 32/64 bit edition
Database server software (Oracle server)	Oracle server 9i, 10g, or 11g Standard/enterprise 32/64 bit edition (64 bit edition required in Windows OS)

Operating system	Windows 2003 enterprise 64bit edition , or Windows 2008 standard/enterprise 32/64 bit edition (64 bit edition required for Oracle server) - UNIX or LINUX OS can also be used for Oracle
-------------------------	--

Infinity.Link Server

General purpose Web Server (Quad Xeon)

16 GB Memory (RAM)

120 GB of available storage space

Hardware Max Specs:

General	
Configuration	Intel Xeon Quad-Core Server
Architecture	
Form factor	Rack Mountable or Tower Design
Processor(s) (Intel)	
Processor (CPU)	Quad Core Xeon 3.0 GHz/12 MB processors
Memory Standard	
Cache memory	12 MB cache per processor
Memory (RAM)	16GB ECC DDR3 (up to 192GB DDR3 800MHz,1066MHz, or 1333Mhz)
Network controller(s)	
Gigabit Ethernet NIC PCI	Dual port Gigabit network adapters with failover and load balancing capabilities.
Storage Controller(s)	
RAID Controller	PERC H200/H700 (6Gb/s) 2 internal channels, 2 external channels, 256/512MB battery backed cache
Internal Storage (Bays)	2.5" or 3.5" Hard Drive Option
Storage	
Optical Drive	DVD-ROM Drive 24x
Hard Drives (Hot-plug drive options)	• 3.5" SATA (7.2K): 80 GB,160GB, 250GB, 500GB, 750GB, 1TB • 2.5" SATA II (7.2K RPM): 80GB, 120GB, 160GB, 250GB • 3.5" SAS (15K): 73GB, 146GB, 300GB , 450GB • 2.5" SAS (10K RPM): 36GB, 73GB, 146GB, 147GB, 300GB

Redundancy	
Cooling	Hot Plug Redundant fan
Power Supply	Two Hot plug redundant PSUs
Operating system	Microsoft Windows 2003 Server Enterprise or Higher

Software

Microsoft Internet Information Server (IIS)

Microsoft dot.NET Framework Release 2.0.x Installed and Registered

SSL certificate (security purposes) - Optional

Database Engines supported

MS SQL 2005 or higher (Standard or Enterprise)

Interconnectivity

Internet Uplink

Server available on the internet

Public DNS registry

b. What system architecture do you propose? Describe the number and type of: application servers, database server(s), and development and test environments. Describe your proposal's technical architecture (preferably using a PowerPoint or Visio diagram). This should show components such as the database server, applications server, reporting server, test/training server, firewall(s), web server(s), web browser, minimum workstation requirements, remote access, wireless connectivity, network connectivity to LANs and WAN, etc. Describe any potential use of virtual server technologies (e.g. Microsoft Virtual Server, VMware) and application accelerators and note what Vendors you partner with or recommend and/or support.

Our recommendation is to have separate database and application server for each CIS Infinity system. Other applications may reside on both the database server as well as the application server.

However, the software can be installed on a single server and we have several clients that do so.

A web server is required for Infinity.Link.

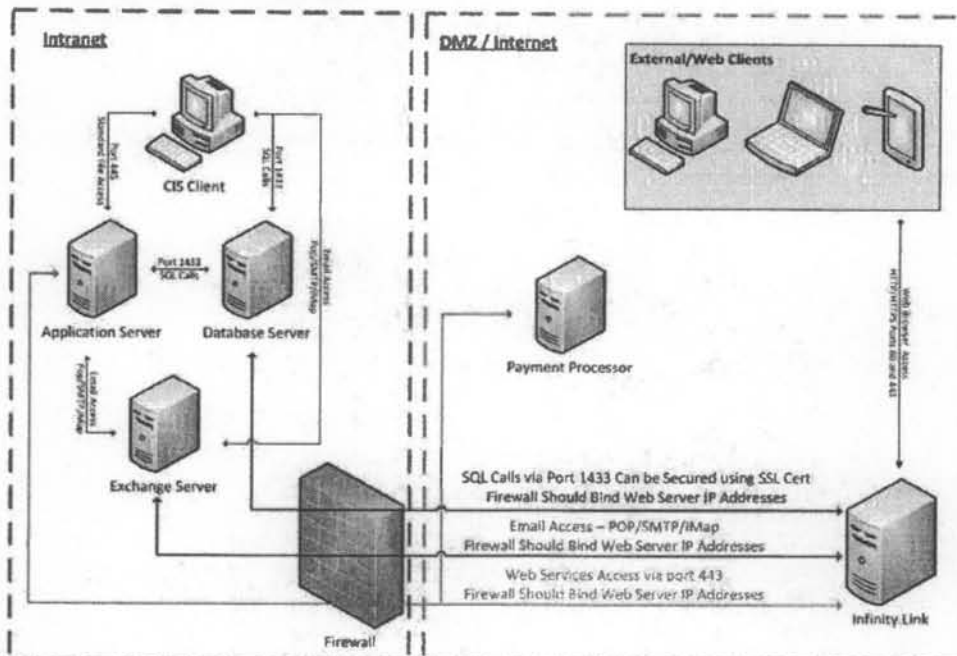
Citrix is required if there are remote offices.

Your CIS Infinity installation allows you to create as many environments as required and includes a complete, fully-functional and distinct test system that allows you to support testing of customization, new releases and software upgrades. To achieve this, a testing database is defined on the database server, and a testing environment is created on the application server.

Technical Architecture

CIS Infinity with Infinity.Link

This diagram Shows a typical configuration with a Payment Processor that does not provide Payment Input Screens



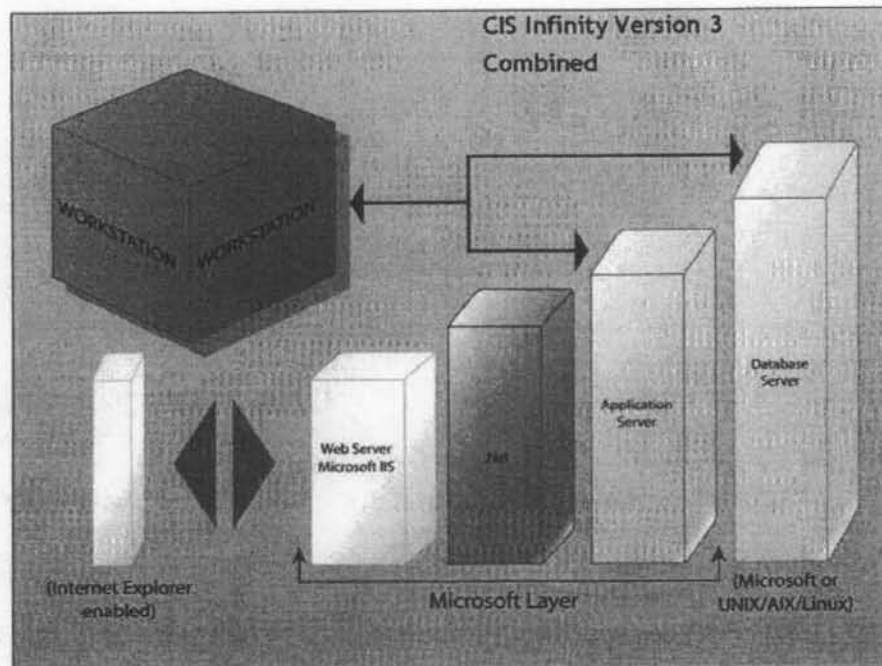
Advanced has many clients that have deployed CIS Infinity in a virtual environment that utilizes a third party virtual server (VMware, etc.). There are no specific requirements or components for CIS Infinity to be run in a virtualized environment.

c. Please describe the physical and technical preferences for a user acceptance testing (UAT) environment.

Each implementation goes through many rounds of testing, including functional testing, integration testing and User Acceptance Testing. Our implementation methodology utilizes best practices from the industry, built with testing scripts and scenarios, enables end users to walk through end to end testing. This phase of the implementation is typically a great indicator as to whether or not the City is ready for Go Live.

d. Describe your proposal's information architecture/model (preferably using a PowerPoint or Visio diagram). This should depict data models, taxonomy, data elements, coding structures, a process for standardizing on a particular coding structure, data definitions (employees, Vendors, invoices, etc.)

CIS Infinity, Version 3 is a client/server application. It is architected using an N-tier approach, with a clear separation between the data access layer, the business process layer and the presentation/user interface layer. CIS Infinity and the other products in the Infinity product suite are primarily built using Microsoft programming tools, in particular .NET.



6.6 Vendor Questionnaire - Technical Requirements Form

1.	What database are you proposing?
	CIS Infinity operates with either MS SQL or Oracle as a backend database. CIS Infinity supports the following database versions: SQL 2005-2008 R2 Oracle 9i-11g
2.	Does your proposal contain or envision the use of a data warehouse? If yes, describe your data warehousing capabilities and architecture.
	No data warehouse is proposed.
3.	Describe the system administration tools that are used to manage the application including any data archival tools, tools for managing application updates, online help management tools, etc.
	Data archiving is a function of the database. Typically data is not archived/purged. An executable is provided for each update along with build logs. Updates are cumulative, thereby allowing the City to skip updates if so desired. Dynamic hyperlinks to City specific help documentation can be placed anywhere within the main customer inquiry form to walk users through City specific processes. Standard help text is provided with the application and updated with every release For upgrades, the client is notified of its availability via email. The client would then download the build from the Advanced FTP web site. After the download is complete the client, via CustomerWise, requests a date and time for the build to be applied to the test or production system since exclusive access to the system is required. Then Advanced will apply the build and the upgrade is complete. Minor upgrades and patches do not require vendor intervention. The majority of our clients handle these items on their own. However, Advanced is always available to assist the client if issues arise. To install a minor upgrade, the client downloads an upgrade application from the Advanced FTP site. Clients can then apply the upgrade applications to each of their environments (test and production) independently. It is a single step-upgrade with the Administrator confirming and then reconfirming they wish to upgrade the environment. Once the confirmation is completed, the upgrade is executed without further user intervention. On our client portal www.mycisinfinity.com we provide Entity Relationship Diagrams and a Data Dictionary, which form an important part of the Advanced plan for increased interoperability and extensibility.

4.	Describe the network management systems that either your system uses, interoperates/integrates with, or you recommend. Please specify.																																				
	CIS Infinity supports Active Directory.																																				
5.	Describe what, if any, footprint (e.g. local software artifacts such as DLLs) exists on the user's desktop.																																				
	The CIS Infinity Client must be installed to interact with the data on the CIS Infinity Application Server.																																				
6.	Describe the minimum hardware, software, storage, memory, operating system and other requirements for desktop computers to access the application such that the City of Columbia can determine the extent to which existing computers must be upgraded or replaced.																																				
	The following outlines what is required to run CIS Infinity on client desktops for primary and secondary/casual users. <i>CIS Infinity Desktop - Primary User</i> <table border="1"> <tr> <td colspan="2">Processor(s) (Intel)</td> </tr> <tr> <td>Processor (CPU)</td> <td>Intel® Xeon® Dual Core</td> </tr> <tr> <td colspan="2">Memory Standard</td> </tr> <tr> <td>Memory (RAM)</td> <td>6GB DDR3 SDRAM at 1333Mhz - 6 DIMMS</td> </tr> <tr> <td colspan="2">Storage</td> </tr> <tr> <td>Hard Drives</td> <td>100 GB IDE Hard Drive 7200 rpm</td> </tr> <tr> <td colspan="2">Communications</td> </tr> <tr> <td>Fast Ethernet NIC</td> <td>Integrated Gigabit Ethernet NIC PCI 10/100/1000</td> </tr> <tr> <td>Operating system</td> <td>Microsoft Windows XP Professional, Vista or 7 Professional (32 or 64 bit)</td> </tr> <tr> <td colspan="2">Applications</td> </tr> <tr> <td>Installed applications</td> <td>Microsoft Office 2003 Professional or higher</td> </tr> </table> <i>CIS Infinity Desktop - Casual User</i> <table border="1"> <tr> <td colspan="2">Processor(s) (Intel)</td> </tr> <tr> <td>Processor (CPU)</td> <td>Intel® Xeon®</td> </tr> <tr> <td colspan="2">Memory Standard</td> </tr> <tr> <td>Memory (RAM)</td> <td>2 GB DDR SDRAM</td> </tr> <tr> <td colspan="2">Storage</td> </tr> <tr> <td>Hard Drives</td> <td>60 GB IDE Hard Drive 5200 rpm</td> </tr> <tr> <td colspan="2">Communications</td> </tr> </table>	Processor(s) (Intel)		Processor (CPU)	Intel® Xeon® Dual Core	Memory Standard		Memory (RAM)	6GB DDR3 SDRAM at 1333Mhz - 6 DIMMS	Storage		Hard Drives	100 GB IDE Hard Drive 7200 rpm	Communications		Fast Ethernet NIC	Integrated Gigabit Ethernet NIC PCI 10/100/1000	Operating system	Microsoft Windows XP Professional, Vista or 7 Professional (32 or 64 bit)	Applications		Installed applications	Microsoft Office 2003 Professional or higher	Processor(s) (Intel)		Processor (CPU)	Intel® Xeon®	Memory Standard		Memory (RAM)	2 GB DDR SDRAM	Storage		Hard Drives	60 GB IDE Hard Drive 5200 rpm	Communications	
Processor(s) (Intel)																																					
Processor (CPU)	Intel® Xeon® Dual Core																																				
Memory Standard																																					
Memory (RAM)	6GB DDR3 SDRAM at 1333Mhz - 6 DIMMS																																				
Storage																																					
Hard Drives	100 GB IDE Hard Drive 7200 rpm																																				
Communications																																					
Fast Ethernet NIC	Integrated Gigabit Ethernet NIC PCI 10/100/1000																																				
Operating system	Microsoft Windows XP Professional, Vista or 7 Professional (32 or 64 bit)																																				
Applications																																					
Installed applications	Microsoft Office 2003 Professional or higher																																				
Processor(s) (Intel)																																					
Processor (CPU)	Intel® Xeon®																																				
Memory Standard																																					
Memory (RAM)	2 GB DDR SDRAM																																				
Storage																																					
Hard Drives	60 GB IDE Hard Drive 5200 rpm																																				
Communications																																					

	Fast Ethernet NIC PCI	Integrated Fast Ethernet NIC PCI 10/100
	Operating system	Microsoft Windows XP Professional, Vista or 7 Professional (32 or 64 bit)
	Applications	
	Installed applications	Microsoft Office 2003 Professional or higher
System Performance		
1.	System response time must not impede the ability for departmental staff to perform their required job functions using the system. Will your system be available 99.5% of the time, except for planned downtime?	
	Periodic system updates from Advanced may require a brief period of downtime in order to add new tables and/or fields to the database in order to support new functionality. It is at the discretion of the utility as to when they want to run these updates. Backup routines can be scheduled using tools within SQL Server but do not require downtime. Most customers schedule these events to occur either in the evening or over the weekend along with the rest of their required network maintenance. With respect to availability, as this is a mission critical system, CIS Infinity is up and available all the time. We have customers with over 250,000 meters that have CIS Infinity available to them 100% of the time.	
2.	Can you guarantee a 3-second maximum response time?	
	The estimated transaction processing time depends entirely on the process being run. Typical processing time for a bill calculation ranges between .5 and 1 second, for example, depending on the number and complexity of billing calculations being performed. CIS Infinity uses state-of-the-art technology and allows for multithreading/processing to maximize performance.	
3.	What are your guarantees on system performance?	
	Advanced will guarantee response times in the contract provided they are linked to specific hardware and network specifications. Should Advanced be selected, Advanced would work with the City and your hardware vendor of choice to ensure a hardware platform that meets your performance requirements. Typically during the contract discussions, response times are linked directly to several critical processes, such as account inquiry, on a step by step basis and expected response times.	
Security		

1.	Describe the identification and authorization capabilities of your proposed solution for users.
	Security setup is similar to Microsoft security. System administrators create user IDs and users can belong to one or more groups. Objects in CIS Infinity can be restricted by user ID, or by group. The first level of security in CIS Infinity is the ability to completely configure the user's menus and items on menus. If you do not wish to give a user access to a form you can simply not place the form on the user's menu. System Administrators can pre-define a series of menus that are common, and those menus can be placed on the users menu. Each user's menu does not have to be defined from scratch and could simply have the pre-defined menus on them. Each item that can be added to the users menu comes with a pre-defined description from Advanced, these descriptions can be customized by the System Administrators to suit your needs and terminology. Security in CIS Infinity is object based rather than field and table based. This allows system administrators to secure not only secure fields, but objects such as buttons and pick lists. You can secure anything you see on the forms of CIS Infinity rather than just restrict users' access to fields or tables.
2.	Describe how your system interoperates with Active Directory.
	CIS Infinity can integrate with Active Directory/LDAP for authentication and single sign-on capabilities.
3.	Describe the security audit capabilities of your proposed solution.
	The CIS Infinity security model is based on objects – a security rule can be applied to any object in the application, from individual fields and menu items to entire forms. CIS Infinity also comes with an audit report where a report can be generated to view all changes in a certain date range, by a specific user, or to a specific table or field.
4.	What functions does your proposed system have to protect the privacy of information designated "private" (e.g. personally identifiable, SSN, credit card, ACH, HIPAA, etc.) that it processes or stores?
	By default, CIS Infinity encrypts sensitive fields such as SSN, DL, banking information, etc. Through configuration, the City can determine which fields they would like to encrypt. Further, CIS Infinity is Red Flag as well as PA-DSS compliant (PCI certified). Advanced

	and CIS Infinity are fully certified through the PCI Security Standards Council Quality Assurance Program. Our certification is listed on their website under the List of Validated Payment Applications.
--	---

8.2 Vendor Hosted Option

Advanced is proposing to implement CIS Infinity as a Client-hosted solution for the City.

Schedule “D”
Minimum Recommended Hardware

Hardware Requirements for CIS Infinity (V4) and Add-On Products

Over 50K and under 100K Accounts

Database Server: Over 50K and under 100K Accounts		
Processor	4-8 CPU / Cores @ 2-3 GHz	
RAM	8GB	
Disk Space		
CIS Infinity (monthly billing based on 5 services)	Initial Size	For Constant Tables (BIF001/BIF002/BIF003)
	1553MB/month	289MB

Application Server: Over 50K and under 100K Accounts			
Processor	4 CPU / Cores @ 2-3 GHz		
RAM	8GB		
Disk Space			
CIS Infinity Folders (Folders may vary based on use, retention period and types of files attached)	Standard Folders	Letters (average file size)	Attachments (average file size)
	1-3GB	30 - 100KB	171KB

Citrix is required if there are remote offices.

Schedule “E”
Software and Services Not Selected with Optional Pricing

The price listing is valid for a period of twenty-four months after “GoLive”

CIS Infinity license fee has two components; a server license fee which is tiered based on the total number of Concurrent Users and a per Concurrent User license fee.

One (1) CIS Infinity Concurrent User license costs \$3,500.00

CIS Infinity Server License fee tiers:

Tier 1: Server License fee to accommodate 1 to 10 concurrent users, inclusive is \$50,000.

Tier 2: Server License fee to accommodate 11 to 20 concurrent users, inclusive is \$75,000

Tier 3: Server License fee to accommodate 21 to 30 concurrent users, inclusive is \$100,000

Tier 4: Server License fee to accommodate 31 to 35 concurrent users, inclusive is \$125,000

Tier 5: Server License fee to accommodate 36 to 40 concurrent users, inclusive is \$145,000

Tier 6: Server License fee to accommodate 41 to 50 concurrent users, inclusive is \$150,000

Tier 7: Server License fee to accommodate 51 to 60 concurrent users, inclusive is \$175,000

Tier 8: Server License fee to accommodate 61 to 70 concurrent users, inclusive is \$200,000

Tier 9: Server License fee to accommodate 71 to 75 concurrent users, inclusive is \$250,000

Tier 10: Server License fee to accommodate 76 to 85 concurrent users, inclusive is \$275,000

Tier 11: Server License fee to accommodate 86 to 90 concurrent users, inclusive is \$285,000

Tier 12: Server License fee to accommodate 91 to 95 concurrent users, inclusive is \$305,000

Tier 13: Server License fee to accommodate 96 to 100 concurrent users, inclusive is \$340,000

Additional server license fee tiers are available for a higher number of users upon request.

Server license fees are cumulative. Server license fees paid previously by the City are deducted from the new server license fee if City increases the number of users and goes to a new server license fee tier, as described above.

Example:

Initial 10 Users License Cost

$$\$50,000 + (10 \text{ Users} * \$3,500) = \$85,000$$

Cost to purchase an additional 5 Users License Cost

$$(\$75,000 - \$50,000) + (5 \text{ Users} * \$3,500) = \$42,500$$

The annual maintenance fee for CIS Infinity is 25% of the total license fees (CIS Infinity Server License fee plus total CIS Infinity Concurrent User License fees) due for CIS Infinity and is subject to the terms described in the Support and Maintenance Agreement.

Schedule "F"
Requirements for Data Conversion Environment

Windows server (any edition) for Operating System

Virtual hardware

Up to 24 Virtual CPUs

64GB RAM

64 Bit

6TB of drive space on a high performance SAN

Software:

SQL server 2008 R2 or 2012 Standard or Enterprise Edition 64 bit Visual Studio 2010 (SSIS)

Office 2013 (or newer) (Word, Excel, Access)

*If Oracle is being used at any stage, Oracle client

SQL Server Database:

One database labelled HTE_DATA, the tables will be just the table name with a dbo scheme.

Example: dbo.UT120AP, dbo.UT400AP...

Consultant to have administrative access to the database and server to perform remote restarts if needed.

Conversions do an intense amount of reading and writing. We recommended dedicated memory.

MASTER SOFTWARE IMPLEMENTATION SERVICES AGREEMENT

THIS MASTER SOFTWARE IMPLEMENTATION SERVICES AGREEMENT ("Implementation Services Agreement") is made and entered into this _____ day of _____, 2014 ("Effective Date") by and between: **N. HARRIS COMPUTER CORPORATION** ("Consultant"), a Foreign Corporation with authority to transact business within the State of Missouri, and with its principal place of business at 1 Antares Drive, Suite 400, Ottawa, Ontario K2E 8C4, and **THE CITY OF COLUMBIA** ("Client"), a Missouri municipal corporation, with its principal place of business at 701 E Broadway, 5th Floor, Columbia, Missouri 65201. Client and Consultant are each individually referred to herein as a "Party" and collectively as the "Parties."

RECITALS

1. The Client wishes to retain Consultant to perform the Services (as defined herein).
2. The Client and Consultant agree to enter into three (3) separate agreements each dealing with a separate aspect of the software: a Master Software License Agreement, a Master Support and Maintenance Agreement and a Master Software Implementation Services Agreement.

NOW THEREFORE, in consideration of the mutual covenants set out in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged), the Parties agree as follows:

ARTICLE I INTERPRETATION

1.1 Definitions

Throughout this Agreement, except as otherwise expressly provided, the following words and expressions shall have the following meanings:

- (a) **"Agreement"** and similar expressions mean this Software Implementation Services Agreement, including all of its Schedules and all instruments supplementing, amending or confirming this Agreement. All references to **"Articles"** or **"Sections"** mean and refer to the specified Article or Section of this Agreement except where a different agreement is explicitly identified.
- (b) **"Change Order"** means any written documentation between the Client and Consultant evidencing their agreement to change particular aspects of this Agreement with no increase in cost. Any services that are considered to be materially out of the scope of the Agreement or result in an increase in the contract price shall only be approved by written amendment to the Agreement.

- (c) **“Completion of Services”** means that the Software is fully operational and performing in conformity with the specifications set out herein, including the Client’s Functional Specifications.
- (d) **“Contract Documents”** means the following documents:
 - a) Master Software License Agreement and attached Schedules
 - b) Master Software Implementation Services Agreement and attached Schedules
 - c) Master Support and Maintenance Agreement and attached Schedule and Exhibits
 - d) Scope of Work – Attached as Schedule “A” to this Agreement
 - e) Documents from Consultant’s Proposal including the cover letter, pages 1-5, 13-132, and 142-156, the proposed Project Plan (pages 1-15), responses to the General and Technical Specifications (pages 1-12), and responses to the Utility Billing Specifications (pages 1-20).– Attached as Schedule “D”
- (e) **“Deliverable”** means whether used in the singular or plural the Software, data conversion, interfaces, written reports, training, and configuration.
- (f) **“Project Schedule”** means the graphic depiction (Microsoft Gantt chart) describing the start date, any intermediate milestone dates and the completion date by which Consultant and Client are required to perform their obligations under the Scope of Work. Such schedule may be amended or modified by mutual specific written agreement of the Parties’ respective representatives from time to time in accordance with the terms of this Agreement.
- (g) **“Required Programs”** has the meaning set out in Article II (b) hereof.
- (h) **“Scope of Work”** means the scope of work appended hereto as Schedule “A” delineating, among other things, the Services that will be provided by Consultant to Client pursuant to this Agreement, as such schedule may be amended or modified by mutual specific written agreement of the parties’ respective representatives from time to time in accordance with the terms of this Agreement.
- (i) **“Services”** has the meaning set out in Article II hereof.
- (j) **“Software”** means the program material in machine-readable or interpreted form, and may include, where appropriate, listings of either machine code or source code and related materials, including instructions and documentation provided by Consultant to Client, including any such programs provided subsequent to this Agreement, and including all copies made by Client. The Software to be provided by Consultant at the inception of this Agreement is identified on Schedule “A,” of the Master Software License Agreement. Third

Party Software is included in the definition of Software except where License Agreement explicitly states otherwise.

- (k) **“System”** means all software modules licensed by Consultant to the Client as configured to meet Client’s requirements and Functional Specifications set forth in the Contract Documents. This includes modifications, customizations and data interfaces or exchanges as outlined in the Scope of Work.
- (l) **“Third Party Software”** means the third party software product licensed to the Client by Consultant and described in Schedule “A” of the Master Software License Agreement.

To the extent that a capitalized word is used in this Agreement, should it not be properly defined in this Agreement then it shall have the meaning attributed to it in the Software License Agreement executed concurrently with this Agreement. Any discrepancy between a defined term in this Agreement and one in the Software License Agreement shall be resolved in favor of the definition in Master Software License Agreement, to the extent that there is an inconsistency.

1.2 Schedules

The Schedules described below and appended to this Agreement shall be deemed to be integral parts of this Agreement.

Schedule “A” -	Scope of Work
Schedule “B” -	Fee Structure & Payment Schedule
Schedule “C” -	Sample Form Change Order
Schedule “D” -	Documents from Consultant’s Proposal including the cover letter, pages 1-5, 13-132, and 142-156, the proposed Project Plan (pages 1-15), responses to the General and Technical Specifications (pages 1-12), and responses to the Utility Billing Specifications (pages 1-20).

In the event of any conflict or inconsistency between the terms and conditions in the main body of this Agreement and the terms and conditions in any Schedule, the terms and conditions of the main body of this Agreement shall control.

ARTICLE II CONSULTING SERVICES

2.1 Consultant’s Services

In order to achieve the Completion of Services, Consultant agrees, subject to the terms and conditions of this Agreement, to perform the following services (the “Services”) for the Client as more fully described in the Scope of Work in Schedule “A”:

- (a) Oversee and implement the conversion from the Client's existing software applications to Consultant's Software substantially in accordance with the Scope of Work and timetable specified in the Project Schedule.
- (b) Install the Software and perform necessary set up and configuration operations, and perform testing in accordance with the Scope of Work and timetable specified in the Project Schedule.
- (c) Oversee and implement interfaces or data exchanges required by the Client as specified in the Scope of Work and perform testing in accordance with the Scope of Work and timetable specified in the Project Schedule.
- (d) Provide training substantially in accordance with the Scope of Work and timetable specified in the Project Schedule.

- (i) Consultant recommends a maximum of twelve (12) people in each training class for optimal training.

- (ii) Client is required to make copies of the training manuals required for the training classes either by photocopy or electronic duplication each of which is subject to the restrictions and obligations contained in this Agreement.

On-line reference documentation is delivered with each release. Client may print this documentation solely for its internal use.

- (iii) Consultant shall provide all standardized classroom training courses associated with this Agreement on-site at Client at such time as agreed upon by Client and Consultant project managers according to the Project Schedule.

- (iv) Cancellation of any on-site Services by Client is allowed for any reason if done in writing more than fourteen (14) days in advance of such Services. Provided Consultant has given Client thirty (30) days' notice of training and the Consultant's requirements for the training including information on assigned tasks to Client, Client will be billed for any non-recoverable direct costs incurred by Consultant that result from a cancellation by Client with fourteen (14) days or less of scheduled on-site Services. Additionally, Client hereby acknowledges that cancellation of on-site Services means that such on-site Services will be rescheduled as Consultant's then current schedule permits. Consultant is not responsible for any delay in Client's project resulting from Client's cancellation of Services. If upon Consultants arrival, the Client is not adequately prepared or has not completed the assigned tasks for such visit by Consultant, then the Client will be billed 100% of the on-site fee and scheduled on-site Services can be cancelled by Consultant. If additional Services are required because the Client was not adequately prepared, Consultant will

provide either a Change Order or a proposed contract amendment to the Client for the additional Services. Notwithstanding the foregoing, Consultant shall not bill Client and Client shall not be responsible for any costs if Consultant has not provided Client with written notice of the training requirements and assigned tasks thirty (30) days prior to the training date.

(v) In the event the Parties agree to cancel any on site Services, Consultant shall make available resources to perform the canceled Services within fourteen (14) days of the cancellation notice, or otherwise agreed to by the Parties.

(vi) Consultant shall submit to Client an agenda of training topics, timing and Client resources expected to participate, and training manuals which are the subject of a training session two weeks in advance of any such training session. Consultant shall provide to the Client all details associated with the layout of the training facility, computer requirements, as well as all associated media necessary to deliver the course. Further, Consultant shall prepare the training database and environment in advance such that users have hands on training on the Software. Consultant shall provide training/software functionality demonstrations to Client prior to the software being configured to meet the Client's requirements. Consultant shall also provide training to Client after the software has been configured to meet the Client's requirements. Client agrees to conduct a rating of the course after its completion and communicate the results of this rating to Consultant. In the event it is determined by consensus of the Client that the training was "ineffective" due to lack of preparation by Consultant or other training deficiency, Consultant shall remedy the deficiencies and repeat the session in question at no cost to Client.

- (e) The Scope of Work describes in greater detail the Services, the method by which the Services shall be performed and other obligations on the part of the two Parties. To the extent that the Scope of Work more explicitly details the Services or the obligations of a Party, then those details shall prevail over any other document that is less explicit.

2.2 Performance by Consultant

- (a) Manner of Performance -- Consultant warrants that it shall perform the Services in a professional and workmanlike manner and shall only use qualified and experienced personnel. Consultant shall maintain sufficient employees for the performance of all terms under this Agreement. Consultant warrants and agrees that, at all times, the employees of Consultant furnishing or performing any services shall do so in a proper, workmanlike, and dignified manner.

- (b) Consultant's Discretion -- Consultant shall determine in its sole discretion the manner and means by which the Services shall be performed, with due consideration of adequate knowledge transfer to the Client personnel. Consultant will communicate openly with the Client on its methodology, manner and means.
- (c) Conduct on Client's Premises
- (i) Consultant agrees that all of its employees who are working for or on behalf of Consultant upon the Client's premises shall obey the rules and regulations that are established by the Client and shall comply with the reasonable directions of the Client's Project Manager.
- (ii) Consultant shall be responsible for the acts of its employees and agents while on the Client's premises. Accordingly, Consultant agrees to take all necessary measures to prevent injury and loss to persons or property located on the Client's premises. Consultant shall be responsible for all damages to persons or property caused by Consultant or any of its agents or employees. Consultant shall promptly repair, to the specifications of the Client, any damage that it, or its employees or agents, may cause to the Client's premises or equipment within the time period agreed to by the Parties. On Consultant's failure to do so or if the Parties cannot agree to a time period for repairs, the Client may repair such damage and Consultant shall reimburse the Client within thirty (30) days for the cost of any repairs.
- (iii) Consultant agrees that, in the event of an accident of any kind, Consultant shall immediately notify the Client's Project Manager and shall furnish a full written report of such accident.
- (iv) Consultant shall perform the services contemplated in the Agreement without interfering in any way with the activities of the Client's employees or visitors.
- (v) Consultant and its employees or agents shall have the right to use only those facilities of the Client that are necessary to perform services under this Agreement and shall have a right to access any other facilities of the Client only with the permission of the Client's Project Manager.
- (vi) The Client shall have no responsibility for the loss, theft, mysterious disappearance of, or damage to equipment, tools, materials, supplies, and other personal property of Consultant or its employees, agents, subcontractors, or material-men.
- (vii) Names of Subcontractors. Consultant agrees to furnish the Client's Project Manager with the name(s) of all Consultant or sub-contract personnel and their position title/roles before they come on site for security purposes.

- (d) Inquiries by Client - Consultant shall respond no later than the next business day to any inquiries pertaining to this Agreement from the Client.
- (e) Independence - As an independent consultant, Client retains Consultant on an independent contractor basis and not as an employee.
- (f) Coordination of Services - Consultant agrees to work closely with Client staff in the performance of Services and shall be available to Client's staff, consultants, and other staff at all reasonable times.
- (g) Maintenance and Inspection - Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of Client, during normal business hours, to examine, audit, and make transcripts or copies of such records and any other documents created, pursuant to the Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the agreement for a period of three (3) years from the date of final payment under this Agreement unless Consultant is required to maintain such records pursuant to any law or regulation.
- (h) Subcontractors - Consultant may use subcontractors in connection with the work performed under this Agreement. When using subcontractors, however, Consultant shall obtain written prior approval from the Client for activities or duties to take place at the Client site. In using subcontractors, Consultant shall be responsible for all their acts and omissions to the same extent as if the subcontractors were employees of Consultant.
- (i) Approval of Consultant Subcontractors and Staff - Client shall have the right to interview and approve all subcontractors, Consultant's Project Manager, and employees assigned to Client by Consultant prior to commencement of work by Consultant. In the event that an employee, subcontractor or agent of Consultant is, in the reasonable opinion of the Client, uncooperative, inept, incompetent, or otherwise unacceptable, Consultant agrees to remove such employee, subcontractor or agent from his or her responsibilities associated with the Agreement. In the event of such a removal, Consultant shall, within fifteen (15) business days, fill this representative vacancy as described above. Regardless of whom Consultant has designated as its representative, Consultant shall remain the ultimately responsible for performing the tasks and responsibilities presented in this Agreement.
- (j) Developed Solution - This Agreement sets forth the terms and conditions upon which Consultant will provide a "Developed Solution" for installation of the Software for use by the Client. Consultant shall provide a complete "Developed Solution" to the Client inclusive of Software and Services as defined in Schedule "A" - Scope of Work. Consultant shall take full responsibility for the successful installation of the Software in all phases of design, installation, training,

conversion, testing, interface/data exchange development and configuration but that Client acknowledges and agrees that no solution is 'standard' and that the installation process is intricate and subject to unforeseen circumstances beyond the control and contemplation of Consultant. The Client must be fully involved and provide such assistance and information as is necessary for the effective and successful implementation of the Software. The Developed Solution shall also include software and services provided by third parties under contract with Consultant. The Parties agree that the Scope of Work is an actual negotiated document detailing the precise Services to be performed and the related deliverables and milestones.

- (k) Liquidated Damages. In the event that Consultant shall fail to meet the Go-Live date per the mutually agreed, approved and documented Go-Live date in the Project Schedule, the amount payable by Client to Consultant shall be reduced as follows by only one of the applicable subsections (and where no subsection applies, no liquidated damages are payable):
- i. If Go-Live occurs 31 to 60 days beyond the approved Go Live date, the amount payable by Client to Consultant shall be reduced by \$10,000; or
 - ii. If Go-Live occurs 61-90 days beyond the approved Go Live date, the amount payable by Client to Consultant shall be reduced by \$20,000; or
 - iii. If Go-Live occurs 91 days or more beyond the approved Go Live date, the amount payable by Client to Consultant shall be reduced by \$50,000.

In no event shall the reduction in the amount payable to Consultant by Client for schedule delays exceed \$50,000.

Notwithstanding the foregoing, said liquidated damages shall not apply if the failure is caused in whole or in part by Client, or the failure is caused in whole or in part by another provider under contract with Client for work related to the Project, or as a result of events of Force Majeure. In the event that Client shall suspend the performance of work, delay any deliverable date, or cause a delay in performance by failing to fulfill any of its obligations under this Agreement, then any applicable delivery schedule shall be extended by a period of time equal to the time lost because of any such delay. All liquidated damages shall be considered to be direct damages paid by Consultant.

The total amount of any liquidated damages assessed may be used by the Client as credits to offset software maintenance payments, spread equally across the following two (2) years of maintenance. In the event the Services are not completed or this Agreement is terminated as provided therein, the amount of liquidated damages assessed prior to the date of termination, may first be deducted by the Client from any remaining amount due to Consultant for Services performed and accepted as provided under this Agreement. The Client may also deduct and/or withhold from payments remaining due or sums remaining unpaid

under this Agreement to Consultant as partial or total payment of liquidated damages.

Any disagreements as to the validity and responsibility of the cause of delay to the Go Live date or in relation to a dispute regarding the notices for liquidated damages described above shall first be submitted to mediation pursuant to this Agreement prior to initiating litigation.

2.3

Performance by Client

- (a) Cooperation by Client -- The Client acknowledges that the success and timeliness of the implementation process shall require the active participation and collaboration of the Client and its staff and agrees to act reasonably and cooperate with Consultant to achieve the Completion of Services and installation of the Software.
- (b) Required Programs -- The Client acknowledges that the use of the Software requires that the Client obtain and install additional required software programs (the "Required Programs"), as detailed in Schedule "A" of the Software License Agreement, and the Client agrees that the acquisition of the Required Programs shall be at its sole cost and that the cost thereof is not included in the fees herein. The Client further acknowledges that the operation of the Software requires the Client's hardware to be of sufficient quality, condition and repair, and the Client agrees to maintain its hardware in the appropriate quality, condition and repair at its sole cost and expense except as provided in Section 3.01(d) of the Master Software License Agreement, in order to facilitate the achievement of Completion of Services. If the Client has not properly installed the Required Programs on hardware of sufficient quality, condition and repair, Consultant shall have the right to suspend the Services and the related scheduled time frames until these issues have been dealt with by Client sufficiently and to Consultant's reasonable satisfaction.
- (c) Project Manager -- The Client shall appoint a project manager (the "Project Manager") who shall work closely with Consultant to facilitate the successful completion of the implementation process and who shall be responsible for supervising the staff of the Client and their cooperation with and participation in such process.
- (d) Additional Client Obligations
 - (i) Client shall install Updates within a reasonable period of time of Consultant's notification of their availability.
 - (ii) Client shall notify Consultant of suspected defects in any of the Software supplied by Consultant. Client shall provide, upon Consultant request,

additional data deemed necessary or desirable by Consultant to reproduce the environment in which such defect occurred.

- (iii) Client shall allow the use of online diagnostics on the Software supplied by Consultant to Client, if required by Consultant during problem diagnosis. Client shall provide to Consultant, at Client's expense, access to the Designated Computer System via the Client's firewall to communications software (e.g. PC Anywhere, WebEx, Web Demo).
- (iv) Client shall ensure that its personnel are, at relevant stages of the project, educated and trained in the proper use of the Software in accordance with applicable Consultant manuals and instructions. If Client's personnel are not properly trained as mutually determined by Consultant and Client, Client agrees that such personnel will be trained by Consultant or Client within fifteen (15) days of determination. If Client desires Consultant to perform the required training then Consultant shall be compensated in accordance with this Agreement.
- (v) Client shall establish proper backup procedures necessary to replace critical Client data in the event of loss or damage to such data from any cause. Client shall provide Consultant with access to qualified functional or technical personnel to aid in diagnosis and to assist in repair of the Software in the event of error, defect or malfunction.
- (vi) Client shall have the sole responsibility for:
 - (A) the performance of any tests it deems necessary prior to the use of the Software.
 - (B) proper Designated Computer System installation, configuration, verification, audit controls and operating methods.
 - (C) implementing proper procedures regarding security and accuracy of input and output and restart and recovery in the event of malfunction.
 - (D) timely upgrade and all third party license releases and/or Software products to meet the requirements of the Software.

2.4 Non-performance Escalation

In the event that the Client reasonably determines that Consultant is not performing in a manner consistent with the Agreement, and specifically, to performing its duties as required in the Scope of Work and in accordance with the Project Schedule, then the Client shall have the right to, in the sequence shown: (a) formally notify Consultant of non-performance, (b) provide thirty (30) days from notification by Client for Consultant to correct non-performance after which time the Client reserves the right to withhold any and all disputed

payments pending, including support and maintenance agreement fees, until the non-performance is corrected, (c) request a joint meeting of Consultant and Client decision makers to attempt to resolve the non-performance, (d) require a Consultant employee to be on-site at Client's location at Consultant's sole expense until the non-performance is resolved, (e) request a mediation of the dispute, (f) terminate the Agreement, or (g) initiate a legal proceeding to resolve the claim, controversy or dispute. Consultant shall have the right to request any dispute be subject to mediation prior to the Client's rights to the recourse provided in subsections (f) and (g).

2.5 Allowance for Suspension or Delay due to Client

In the event that the Client shall suspend the performance of Services, delay any deliverable date, or cause a delay in performance by failing to fulfill any of its obligations, then the following shall apply:

- a) Any applicable delivery dates in the Project Schedule shall be extended by a period of time equal to the time lost because of any such delay.
- b) The due date for any deliverable set forth in the Scope of Work and Project Schedule that is dependent on such performance by the Client shall be deemed adjusted equitably to allow for the effect of such delay on Consultant's ability to supply or perform such deliverable.

Following such an event, Consultant shall have all reasonable travel costs (e.g. airfare, hotel) incurred by it that are non-refundable reimbursed by Client, including for any Services that will be required to be redone as a direct result of the delay by the Client.

2.6 Project Schedule and Acceptance

Consultant shall develop a detailed Project Schedule that details both Consultant's and Client's responsibilities. The Project Schedule should be in sufficient detail to specify the conversion, training, testing, acceptance, and live operation activities. Unless the Parties agree otherwise in writing, the Parties agree that a mutually agreeable Project Schedule will be submitted and approved by Client within sixty (60) days of the Notice to Proceed. The Client acknowledges that it is required to negotiate in good faith the Project Schedule. In the event Consultant, at its sole fault, is unable to provide the Project Schedule within sixty days of the Notice to Proceed or as otherwise agreed to by the Parties, Client will have at its option, the ability to terminate the Agreement and obtain all fees paid to Consultant. The Project Schedule will also include the criteria by which the Software, data conversions, data exchanges or interfaces, modifications and customizations will be tested and accepted by the Client.

2.7 Software Support and Maintenance Agreement

Consultant and the Client have agreed to enter into a separate Software Support and Maintenance Agreement which describes the maintenance and support services to be provided by Consultant to the Client. Consultant shall have no obligation under this Agreement to render any maintenance services or related services with respect to non-Consultant software, including Third Party Software included in Schedule "A" of the Master Software License Agreement except as contracted for in writing with the Client.

ARTICLE III FEES AND PAYMENTS

3.1 Fees and Payments

- (a) The Client agrees to pay Consultant total fees as delineated in Schedule “B”. The fee structure and payment schedule is outlined in the attached Schedule “B”.
- (b) During the term of this Agreement, Consultant shall, from time to time, deliver invoices to Client. Each invoice delivered to Client by Consultant shall be due and payable within thirty (30) days upon receipt by Client.
- (c) The Client shall reimburse Consultant for its direct expenses estimated at \$180,000.00 USD however should anticipated expenses exceed estimate, Consultant will provide Client with a contract amendment as defined in Section 3.2 prior to incurring any expenses in excess of \$180,000.00 USD. Direct expenses include, but are not limited to all reasonable travel costs including a travel time rate of \$75.00 per hour to be capped at 5 hours per round trip, meal expenses of not more than \$65.00 per diem (no receipts provided however the total number of per diems invoiced will be provided), a mileage charge based on the current Internal Revenue Service recommended rate per mile, long distance telephone calls and all other reasonable expenses incurred in the performance of Consultant's duties.
- (d) In the event ground transportation is necessary, an automobile will be rented of a small to mid-size variety. If air transportation is necessary, coach travel will be utilized, and all airline flights shall be booked in advance and the lowest possible fare obtainable. All effort will be made to schedule all training minimally one month in advance with Client and therefore, allowing sufficient time for booking airlines. Consultant shall provide the Client a detailed invoice, which outlines the individual, date, and related expenses (with the exception of per diems). In the event of a dispute of the invoice, the Client will notify Consultant within fifteen (15) days of the receipt of such invoice and may ask for further clarification. In the event Client fails to pay all or any portion of an invoice on or before thirty (30) days after the date of the invoice, the invoice payment shall be considered past due.
- (e) In the event Client fails to pay all or any portion of an undisputed invoice on or before ninety (90) days after the date it becomes due, in addition to all other remedies Consultant has under this Agreement or otherwise, Consultant shall have the option to suspend or terminate all Services under this Agreement, provided, however, that Consultant shall provide written notice to Client ten (10) business days prior to suspension or termination of services. Suspension or

termination of any such Services shall not relieve the Client of its obligation to pay its outstanding, undisputed invoices, including any applicable late charges.

- (f) Harris Consultant shall be responsible for paying all taxes, fees, assessments and premiums of any kind payable on its employees and operations. Client is exempt from sales tax and shall provide Consultant with the tax exempt certificate.

3.2 Change Orders and Amendments to the Agreement

With respect to any proposed changes to the Services defined by this Agreement that do not materially impact the scope of either Party's work effort required under this Agreement, the Parties will cooperate in good faith to execute Change Orders in respect thereof, and will not unreasonably withhold approval of such proposed changes. If either Party causes or requests a change that, in the reasonable opinion of the other Party, materially impacts the scope of the Parties' work effort required under this Agreement, such as, but not limited to, changes in the allocation of the resources of the Client and of Consultant applied to a task, changes in completion schedules for individual tasks or for overall implementation, and changes in staffing that require a Party to provide additional work hours, the other Party may propose an amendment to the Agreement to cover the additional work effort required of it.

ARTICLE IV REMEDIES AND LIABILITY

4.1 Remedies and Liability

- (a) Termination of this Agreement shall not affect any right of action of either Party arising from anything which was done or not done, as the case may be, prior to the termination taking effect.
- (b) The Client and Consultant recognize that circumstances may arise entitling the Client to damages for breach or other fault on the part of Consultant arising from this Agreement. The Parties agree that in all such circumstances the Client's remedies and Consultant's liabilities will be limited as set forth below and that these provisions will survive notwithstanding the termination or other discharge of the obligations of the parties under this Agreement.
 - (i) EXCEPT FOR DAMAGES ARISING OUT OF (a) CONSULTANT'S BREACH OF ITS CONFIDENTIALITY OBLIGATIONS, (b) CONSULTANT'S INTENTIONAL MISREPRESENTATION, GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, (c) INJURY OR DEATH TO PERSONS OR (d) DAMAGE TO TANGIBLE OR REAL PROPERTY, BOTH PARTIES AGREE THAT CONSULTANT'S LIABILITY (UNDER BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE), IF ANY, FOR ANY DAMAGES RELATING TO THIS AGREEMENT SHALL NOT

EXCEED 1.0 TIMES THE SERVICES FEES PAID TO CONSULTANT BY THE CLIENT IN CONNECTION WITH THIS AGREEMENT.

- (ii) IN ADDITION TO THE FOREGOING, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL OR OTHER DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO LOST REVENUE, LOSS OF DATA OR LOSS OF PROFITS, EVEN IF SUCH OTHER PARTY HAS BEEN ADVISED OF THE LIKELIHOOD OF THE OCCURRENCE OF SUCH DAMAGES AND NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.
- (iii) CLAUSES (i) AND (ii) SHALL APPLY IN RESPECT OF ANY CLAIM, DEMAND OR ACTION BY A PARTY IRRESPECTIVE OF THE NATURE OF THE CAUSE OF ACTION UNDERLYING SUCH CLAIM, DEMAND OR ACTION, INCLUDING, BUT NOT LIMITED TO, BREACH OF CONTRACT OR TORT.

4.2 Intent

The Parties agree that the limitation of liability as set out in Section 4.1 above shall apply under any circumstances (including as a result of a default under this Agreement, a tort related claim or breach of contract). For the purposes of Section 4.1 only, a Party relying on the limitation of liability shall be deemed to include that Party's shareholders, directors, officers, employees, elected officials and affiliates.

ARTICLE V INDEMNITY

5.1 Indemnity

- (a) To the extent permitted by law, Consultant shall indemnify and hold harmless Client and its agents, officials and employees from and against any and all direct claims, losses, liabilities, damages, costs and expenses (including reasonable attorney's fees and costs) for personal injury or property damage arising from Consultant's negligence or willful misconduct.
- (b) To the extent permitted by law, Client shall indemnify and hold harmless Consultant and its agents, officials and employees from and against any and all direct claims, losses, liabilities, damages, costs and expenses (including reasonable attorney's fees and costs) for personal injury or property damage arising from Client's negligence or willful misconduct.

ARTICLE VI ACCEPTANCE TESTING

Client anticipates performing formal acceptance testing of Deliverables obtained from Consultant and on the System as a whole. This acceptance testing will begin upon formal written notification from Consultant to Client that a Deliverable has been completed and is ready for testing. Upon receipt of this notification, Client will have thirty (30) days in which to complete the acceptance testing for each Deliverable unless such acceptance testing period is otherwise outlined in the Project Schedule. In the event Client determines that a Deliverable does not meet the requirements as defined in the Contract Documents and Documentation, Client shall notify Consultant of such in writing, at which time acceptance for that specific Deliverable will be suspended. Consultant will then have thirty (30) days to satisfy the deficiency, at which time the acceptance testing will be resumed for that Deliverable. In no event shall the time period for acceptance testing by the Client after correction of a deficiency by Consultant be less than ten (10) business days or more than fifteen (15) business days.

At least thirty (30) days prior to Go-Live as described in the Scope of Work project acceptance criteria (the **“Punch List”**) will be mutually agreed and documented. The Punch List will exclude any interfaces identified as post live in the Scope of Work. **“Acceptance”** of a Punch List item shall be considered to occur upon the earlier of completion of a Punch List item to the reasonable satisfaction of the Client or ten (10) business days from Client’s receipt of the Punch List item from Consultant unless Client has provided written notification to Consultant of any deficiencies. **“Final System Acceptance”** occurs upon the Acceptance of all Punch List items. Upon Final System Acceptance, an amount equal to ten percent (10%) of the service fees for the project phase will be payable by the Client.

ARTICLE VII GENERAL

7.1 Force Majeure

Neither Party shall be liable for delay or failure in performance resulting from acts beyond the control of such party (force majeure) including, but not limited to, acts of God, acts of war or of the public enemy, riots, fire, flood, or other natural disaster, acts of government, strike, walkout, communication line or power failure, failure in operability or destruction of the Client’s computer (unless by reason of the negligence of a Party to this Agreement) or failure or inoperability of any software other than the Software. Any applicable delivery schedule shall be extended by a period of time equal to the time lost because of any such delay.

120 Day Maximum

Under no circumstances shall delays caused by a force majeure extend beyond 120 days from the scheduled delivery or completion date of a task, unless prior to the expiration of the 120

days, written notice of permission of the other Party is received which will not be unreasonably withheld. Failure to secure this written prior permission, even in the case of force majeure, shall constitute default by the Party failing to meet the requirement.

Right of Cancellation For Force Majeure

Either Party shall have the right to cancel the Agreement if Force Majeure suspends performance of scheduled tasks by one or more parties for a period of 120 or more days from the scheduled date of the task.

7.2 Confidentiality

- (a) Duty Owed to the Client -- Consultant acknowledges that it may receive information from the Client or otherwise in connection with this Agreement or the performance of the Services. Except for information in the public domain, unless such information falls into the public domain by disclosure or other acts of the Client or through the fault of the Client, Consultant agrees:
 - (i) to maintain this information in confidence;
 - (ii) not to use this information other than in the course of this Agreement;
 - (iii) not to disclose or release such information except on a need-to-know only basis;
 - (iv) not to disclose or release such information to any third person without the prior written consent of the Client, except for authorized employees or agents of Consultant; and
 - (v) to take all appropriate action, whether by instruction, agreement or otherwise, to ensure that third persons with access to the information under the direction or control or in any contractual privity with Consultant, do not disclose or use, directly or indirectly, for any purpose other than for performing the Services during or after the term of this Agreement, any material or information, including the information, without first obtaining the written consent of the Client.

7.3 Termination

- (a) Except for those terms that explicitly survive the expiration or termination of this Agreement, this Agreement shall expire upon the Completion of Services.
- (b) If Consultant should neglect to perform the Services properly or otherwise fail to comply with the requirements of this Agreement, the Client must notify Consultant in writing of such default (a "Default Notice"). Upon receipt of a Default Notice, Consultant must either correct the default at no additional cost to the Client, or issue a written notice of its own disputing the alleged default, in

either case within thirty (30) days immediately following receipt of a Default Notice. If Consultant fails to correct the default, or issue a notice disputing the alleged default, in either case within ninety (90) days following receipt of the Default Notice, the Client may terminate the whole of this Agreement or the part of this Agreement relating to the provision of Services and in such case will be responsible for payment to Consultant of only that part of the fee earned by Consultant for those Services performed up to the time of communication of such notice of termination to Consultant.

- (c) If the Client should fail to comply with its obligations under this Agreement, Consultant must notify the Client in writing of such default (a "Default Notice"). Upon receipt of a Default Notice, the Client must correct the default at no additional cost to Consultant, or issue a written notice of its own disputing the alleged default, in either case within thirty (30) days immediately following receipt of a Default Notice. If the Client fails to correct the default, or issue a notice disputing the alleged default, in either case within ninety (90) days following receipt of the Default Notice, Consultant may terminate the whole of this Agreement and in such case the Client will be responsible for payment to Consultant of only that part of the fee earned by Consultant for that part of the Services performed in accordance with this Agreement up to the time of communication of such notice of termination to the Client.
- (d) The termination of this Agreement prior to the Completion of Services shall result in the concurrent termination of the Support and Maintenance Agreement and of the Software License Agreement.
- (e) The termination or expiration of this Agreement following the Completion of Services shall not affect the rights of either Party in either the Support and Maintenance Agreement or the Software License Agreement.

7.4 Mediation

The Parties agree to submit any claim, controversy or dispute arising out of or relating to this Agreement or the relationship created by this Agreement to non-binding mediation before bringing a claim, controversy or dispute in a court or before any other tribunal. The mediation is to be conducted by either an individual mediator or a mediator appointed by mediation services mutually agreeable to the Parties. The mediation shall take place at a time and location which is also mutually agreeable; provided; however, in no event shall the mediation occur later than ninety (90) days after either Party notifies the other of its desire to have a dispute be placed before a mediator. Such mediator shall be knowledgeable in software system agreements. The costs and expenses of mediation, including compensation and expenses of the mediator (and except for the attorneys fees incurred by either Party), is to be shared by the Parties equally. If the Parties are unable to resolve the claim, controversy or dispute within ninety (90) days after the date either Party provides the other notice of mediation, then either Party may bring and initiate a legal proceeding to resolve the claim, controversy or dispute unless the time period is extended by a written agreement of the Parties.

7.5 **Addresses for Notice**

Any notice required or permitted to be given to any Party to this Agreement shall be given in writing and shall be delivered personally, mailed by prepaid registered post or sent by facsimile to the appropriate address or facsimile number set out below. Any such notice shall be conclusively deemed to have been given and received on the day on which it is delivered or transmitted (or on the next succeeding business day if delivered or received by facsimile after 5:00 p.m. local time on the date of delivery or receipt, or if delivered or received by facsimile on a day other than a business day), if personally delivered or sent by facsimile or, if mailed, on the third business day following the date of mailing, and addressed, in the case of Consultant, to:

N. HARRIS COMPUTER CORPORATION
1 Antares Drive, Suite 400
Ottawa, Ontario K2E 8C4
Attention: CEO
Telephone: 613-226-5511, extension 2149
Fax: 416-496-3910

and in the case of the Client, to:

CITY OF COLUMBIA, MISSOURI
701 E Broadway, 5th Floor
Columbia, MO 65201
Attention: Will Hobart, Purchasing Agent
Telephone: 573-874-7687
Fax: 573- 874-7762

Each Party may change its particulars respecting notice, by issuing notice to the other Party in the manner described in this Section 7.5.

7.6 **Assignment**

Neither Party may assign any of its rights or duties under this Agreement without the prior written consent of the other Party, except that either Party may assign to a successor entity in the event of its dissolution, acquisition, sale of substantially all of its assets, merger or other change in legal status. The Agreement shall inure to the benefit of and be binding upon the Parties to this Agreement and their respective successors and permitted assigns.

7.7 **Reorganizations**

The Client acknowledges that where a "Reorganization" occurs as that term is defined in the Software License Agreement, the same provisions related thereto shall apply to this Agreement. The application of a Reorganization may result in a change in the fees provided for in these provisions.

7.8 Entire Agreement

This Agreement shall constitute the entire agreement between the Parties hereto with respect to the matters covered herein. No other agreements, representations, warranties or other matters, oral or written, purportedly agreed to or represented by or on behalf of Consultant by any of its employees or agents, or contained in any sales materials or brochures, shall be deemed to bind the Parties hereto with respect to the subject matter hereof. Client acknowledges that it is entering into this Agreement solely on the basis of the representations contained herein. However, the Parties agree that two other agreements are being entered into concurrently with this Software Implementation Services Agreement. These two other agreements are the Master Software License Agreement and the Master Software Support and Maintenance Agreement, each of which are separate agreements and are binding in their own right and upon their own terms.

7.9 Section Headings

Section and other headings in this Agreement are for reference purposes only, and are in no way intended to describe, interpret, define or limit the scope or extent of any provision hereof.

7.10 Governing Law and Venue

This Implementation Services Agreement shall be governed by, interpreted and enforced in accordance with the laws of the State of Missouri and/or the laws of the United States of America, as applicable. The venue for all litigation arising out of, or relating to this Agreement, shall be Boone County, Missouri or the United States Western District of Missouri. The Parties hereto irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of Missouri and waive any defense of forum non conveniens.

7.11 Trial by Jury

Client and Consultant hereby waive, to the fullest extent permitted by applicable law, the right to trial by jury in any action, proceeding or counterclaim filed by any Party, whether in contract, tort or otherwise, relating directly or indirectly to this Agreement or any acts or omissions of Consultant in connection therewith or contemplated thereby.

7.12 Invalidity

The invalidity or unenforceability of any provision or covenant contained in this Agreement shall not affect the validity or enforceability of any other provision or covenant herein contained and any such invalid provision or covenant shall be deemed to be severable.

7.13 Waiver

A term or condition of this Agreement may be waived or modified only by written consent of both Parties. Forbearance or indulgence by either Party in any regard shall not

constitute a waiver of the term or condition to be performed, and either Party may evoke any remedy available under the Agreement or by law despite such forbearance or notice.

7.14 Multiple Originals

Three originals of this Software Implementation Services Agreement shall be executed. Consultant shall retain one original. Client shall retain two originals.

7.15 Survival

Section 4.1 and Articles V and VII shall survive the termination and/or expiration of this Agreement.

7.16 Competitive Bid

Client has conducted a competitive evaluation and has concluded such efforts with this negotiated Agreement (including any addenda hereto); therefore, this Agreement may serve as the basis for similar agreements whereby other entities may contract separately with Consultant. Client agrees that Consultant may disclose all or any portion of this Agreement to any of its current or prospective customers.

7.17 Further Assurances

The Parties shall do all such things and provide all such reasonable assurances as may be required to consummate the transactions contemplated hereby, and each Party shall provide such further documents or instruments required by any other Party as may be reasonably necessary or desirable to effect the purposes of this Agreement and carry out its provisions.

7.18 Independent Contractor

Client engages Consultant under this Agreement solely as an independent contractor to perform the Scope of Work and Services which are described in this Agreement. Client and Consultant expressly acknowledge and agree that Consultant is the independent contractor of Client and nothing contained in this Agreement or which otherwise exists shall be construed by Client, Consultant or any third person or entity to create a relationship of joint venturers, partners, or employer and employee.

7.19 Amendments

A term or condition of this Agreement may be waived or modified only by written consent of both Parties. Forbearance or indulgence by either Party in any regard shall not constitute a waiver of the term or condition to be performed, and either Party may evoke any remedy available under the Agreement or by law despite such forbearance or notice.

7.20 Public Records Act

Client is subject to the Missouri Sunshine Law. The Parties agree that this Agreement shall be interpreted in accordance with the provisions of the Missouri Sunshine Law as amended.

7.21 Non-Discrimination By Consultant

Neither Consultant nor anyone with whom Consultant shall contract shall discriminate against any person employed or applying for employment concerning the performance of Consultant's responsibilities under this Agreement. This discrimination prohibition shall apply to all matters of initial employment, tenure, and terms of employment, or otherwise with respect to any matter directly or indirectly relating to employment concerning race, color, religion, national origin, age, sex, sexual orientation, ancestry, disability that is unrelated to the individual's ability to perform the duties of a particular job or position, height, weight, marital status, or political affiliation. A breach of this covenant may be regarded as a default by Consultant of this Agreement.

7.22 Advertising

Consultant shall not use, in its external advertising, marketing programs, or other promotional efforts, any data, pictures, or other representation of the Client except on the specific written authorization in advance of the Client. Consultant shall not install any signs or other displays within the Client's premises. However, nothing in this clause shall preclude Consultant from listing the Client on its routine client list for matters of reference.

7.23 Organization Trademarks

Client warrants that all trademarks Client requests Consultant to affix to articles purchased are those owned by Client and it is understood that Consultant shall not acquire or claim any rights, title, or interest therein, or use any of such trademarks on any articles produced for itself or anyone other than Client.

7.24 Severability

Should any term or provision of this Agreement be held, to any extent, invalid or unenforceable, as against any person, entity or circumstance during the term hereof, by force of any statute, law, or ruling of any forum of competent jurisdiction, such invalidity shall not affect any other term or provision of this Agreement, to the extent that the Agreement shall remain operable, enforceable and in full force and effect to the extent permitted by law, except that to the extent that any provision of Article 6 or the limitation of liability is deemed to be of no force or effect, Consultant shall have the right to void this Agreement.

7.25 Compliance with Laws

Consultant shall, at all times, observe and comply with all federal, state, and local laws, ordinances and regulations.

7.26 Employment of Unauthorized Aliens

Consultant agrees to comply with Missouri State Statute Section 285.530 in that Consultant shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. As a condition for the award of this contract the Consultant shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Consultant shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. Consultant shall require each subcontractor to affirmatively state in its contract with Consultant that the subcontractor shall not knowingly employ, hire for employment or continue to employ an unauthorized alien to perform work within the state of Missouri. Consultant shall also require each subcontractor to provide Consultant with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States.

7.27 Insurance

Prior to performing services under this Agreement, Consultant shall provide Client with certificates of insurance evidencing the following minimum insurance coverage:

- a) Commercial general liability of at least \$2,000,000;
- b) Automobile liability of at least \$2,000,000 combined single limit;
- c) Professional liability of at least \$10,000,000 aggregate; and
- d) Workers compensation complying with statutory requirements;
- e) Umbrella Liability Insurance of \$3,000,000.00.

Consultant shall cause the Client to be named as additional insured on Consultant's Commercial General Liability policy. Consultant shall use a standard Accord Form which states "Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions."

7.28 No Waiver of Immunities

In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either Party's rights or defenses with regard to each Party's applicable

sovereign, governmental, or official immunities and protections as provided by federal and state constitution or law.

7.29 Amendment

This Agreement may only be modified by written amendment signed by the Parties.

7.30 Nature of Client's Obligations

All obligations of the Client under this Agreement, which require the expenditure of funds, are conditional upon the availability of funds budgeted and appropriated for that purpose. The Client warrants that funds have been budgeted and appropriated for the year 2015 and Client shall give prompt notice when such funds have not been budgeted and appropriated in the future.

7.31 No Intended Third Party Beneficiaries

This Agreement is entered into solely for the benefit of Consultant and Client. No provision of the Agreement is intended to nor shall it in any way inure to the benefit of any customer, property owner or any other third party, so as to constitute any such person a third-party beneficiary under the Agreement.

7.32 Data Ownership and Security

- (a) Consultant's Software and any Interfaces shall at all times comply with the terms of this Agreement, good financial industry and accounting practices, applicable laws, Client's Red Flag Rule, and SSAE16 or successive applicable auditing standards. Consultant shall require its subcontractors to at all times comply with the terms of this Agreement, good financial industry and accounting practices, and applicable laws.
- (b) Duty to Report. Consultant shall maintain the security of Client content and data and that of Client's customers and any user that is stored in or in any way connected with Consultant Software Products, services and applications. If either Party believes or suspects that security has been breached or data compromised, whether it be from harmful code or otherwise, the Party shall notify the other Party of the issue or possible security breach within forty-eight (48) hours.
- (c) Binding Subcontractors to Data Security Standards. Consultant shall include similar provisions in Consultant's agreements with subcontractors that perform work or services related to these Consultant Software Products and or have access to the Client's data contained therein or in the cloud storage.

- (d) No Harmful Code. Consultant warrants that the Consultant Software Products do not contain Harmful Code. For purposes of this Agreement, "Harmful Code" is any code containing any program, routine, or device which is designed to delete, disable, deactivate, interfere with or otherwise harm any software, program, data, device, system or service, including without limitation, any time bomb, virus, drop-dead device, malicious logic, worm, Trojan horse or trap or back door. Consultant shall include in contracts with any subcontractor a provision which prohibits the use of Harmful Code.
- (e) Data Ownership and Storage. Except with regard to the data Client enters into the CustomerWise software, Consultant covenants that any data from the Client, its employees or customers or derived therefrom shall be stored in the United States of America. Client must provide and maintain an adequate data conversion environment for Consultant's use as set forth in Schedule "F" of the Master Software License Agreement. The data or any information derived therefrom (hereinafter "Client's Data") shall not be transferred, moved, or stored to or at any location outside the United States of America. All such data and any information derived therefrom shall be confidential and proprietary information belonging to either the Client or its customers or the users of the systems. Consultant covenants that Consultant or subcontractors shall not sell or give away any such Client data or information derived therefrom.

With regard to Client's use of CustomerWise software for support, the Parties agree that the data Client enters into CustomerWise shall be transferred, moved, or stored in Canada. Client shall implement internal procedures to either require Client's staff to either redact customer's personal information or obtain the consent of the customer prior to entering customer's personal information into CustomerWise.

7.33 Consultant's Representations and Warranties

Consultant represents and warrants as follows:

- (a) Consultant is a foreign corporation with authority to transact business within the State of Missouri;
- (b) Consultant has the power and authority to enter into and perform this Agreement and is not prohibited from entering into this Agreement or discharging and performing all covenants and obligations on its part to be performed under and pursuant to this Agreement;
- (c) Consultant has taken all action required by law in order to approve, execute and deliver this Agreement;

- (d) The execution and delivery of this Agreement, the consummation of the transactions contemplated herein and the fulfillment of and compliance by Consultant with the provisions of this Agreement will not conflict with or constitute a breach of or a default under or require any consent, license or approval that has not been obtained pursuant to any of the terms, conditions or provisions of any law, rule or regulation, any order, judgment, writ, injunction, decree, determination, award or other instrument or legal requirement of any court or other agency of government, the documents of formation of Consultant or any contractual limitation, restriction or outstanding trust indenture, deed of trust, mortgage, loan agreement, lease, other evidence of indebtedness or any other agreement or instrument to which Consultant is a party or by which it or any of its property is bound and will not result in a breach of or a default under any of the foregoing;
- (e) The Consultant has taken all such action as may be necessary or advisable and proper to authorize this Agreement, the execution and delivery hereof, and the consummation of transactions contemplated hereby;
- (f) To the Consultant's knowledge, there are no actions, proceedings, judgments, rulings or orders issued by, or pending before any court or other governmental body that would materially adversely affect Consultant's ability to perform its obligations under this Agreement; and
- (g) This Agreement is a legal, valid and binding obligation of Consultant enforceable in accordance with its terms, except as limited by laws of general applicability limiting the enforcement of creditor's rights or by the exercise of judicial discretion in accordance with general principles of equity.

7.34 Data Exchanges or Interfaces

- (a) This Agreement is contingent upon the Client obtaining methods of exchanging data between Consultant and third party software vendors for each and every data exchange identified by the Parties in the Scope of Work and /or otherwise required by this Agreement.
- (b) Requirements.
 - 1. Consultant shall reasonably work with identified third party software vendors to develop, implement, and maintain the data exchanges or interfaces as identified in the Scope of Work.
 - 2. For each data exchange identified in the Scope of Work, Client shall include in its contract with the third party software vendors a provision

requiring the third party software vendor to work with Consultant and Client on developing, implementing, and maintaining each of the data exchanges identified in the Scope of Work.

3. Client shall also require in its contract with third party software vendors that the third party software vendor shall review and sign the specifications, the performance schedule and the test standards related to each applicable data exchange.
 4. For each and every data exchange or interface identified within the Scope of Work, the Parties shall develop proposed specifications for each of the data exchange or interface (hereinafter "Data Exchange Specifications"). The Parties shall reduce the Data Exchange Specifications to writing which shall be signed and dated by all Parties.
 5. For each data exchange, the Parties shall develop a schedule for production, testing, and installation (hereinafter "Data Exchange Schedule.") The Parties shall reduce the schedule(s) to writing which shall be signed and dated by all Parties.
 6. For each such data exchange, the Parties shall agree in writing, signed and dated by both Parties, to the testing standards and requirements (hereinafter "Data Exchange Test Standards").
 7. Client shall issue written notice to proceed with the development of each data exchange.
- (c) Changes to Data Exchange. In addition, the Parties agreeing to a data exchange may, by mutual agreement, impose additional requirements or amend the testing standards or the performance schedule. Should the Parties agree to change or amend any of the specifications, the performance schedule or the test standard, the changes shall be reduced to writing, signed, and dated by both Parties.
- (d) EACH DATA EXCHANGE, ON WHICH THE CLIENT HAS ISSUED A WRITTEN NOTICE TO PROCEED, SHALL BE DEVELOPED ACCORDING TO THE DATA EXCHANGE SPECIFICATIONS IN THE TIME PERIODS SET FORTH IN THE DATA EXCHANGE SCHEDULE. Upon completion of the development of the data exchange, Consultant shall notify Client that data exchange is complete and ready for testing. Client shall timely test the data exchange according to the Data Exchange Test Standards. If the data exchange passes the Client's testing according to the Data Exchange Test Standards, Client shall issue a written notice of acceptance of the data exchange.

7.35**Costs Not To Exceed.**

Total payment for Scope of Work and all other expenses and costs to the Client under this Agreement and described herein shall not exceed nine hundred forty-one thousand eight hundred fifty dollars (\$941,850.00).

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF the parties hereto have duly executed this Software Implementation Services Agreement to be effective as of the date first written above.

CITY OF COLUMBIA, MISSOURI

By: _____
Mike Matthes, City Manager

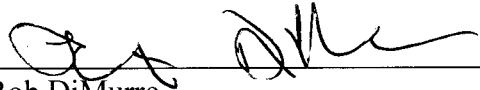
ATTEST:

By: _____
Sheela Amin, City Clerk

APPROVED AS TO FORM:

By: _____
Nancy Thompson, City Counselor

N. HARRIS COMPUTER CORPORATION

By: 
Name: Rob DiMurro
Title: President, Harris Utilities

ATTEST: 
Name: Peter Fanous
Title: Executive Vice President, Advanced Utility Systems

Schedule “A”
Scope of Work



CITY OF COLUMBIA

Scope of Work

For the Implementation of CIS Infinity

**As of
06/06/2014**

Table of Contents

Introduction.....	4
Background.....	4
Objectives	4
Points of Contact.....	6
Primary Point of Contact (POC) - CITY	6
Other Contact(s)	6
Primary Point of Contact (POC) - Advanced	6
Other Contact(s)	6
Project Scope.....	7
Definitions	8
Task 1 – Project Management.....	9
Subtask 1.1 – Project Planning.....	9
Project Schedule.....	9
Communication Plan.....	9
Change Management Plan	9
Test Plan.....	9
Training Plan.....	10
Risk Management Plan.....	10
Advanced and CITY Roles and Responsibilities	10
Issues Management (CustomerWise)	10
Change Order Process	10
On Site Project Facilities.....	10
Subtask 1.2 – Status Reports	11
Subtask 1.3 – Monthly Sponsor Review	11
Task 2 – CIS Infinity Interfaces and Software Modifications	13
Subtask 2.1 – Modified Interfaces	13
Subtask 2.1.1 – ESRI Geographic Information System (GIS).....	13
Subtask 2.1.2 – MUNIS Master Customer Database	14
Subtask 2.1.3 – Tyler Incident Management Interface.....	14
Subtask 2.1.4 – Outage Management System.....	14
Subtask 2.1.5 – Munis Work Management System.....	14
Subtask 2.1.6 – Tyler Cashiering.....	15
Subtask 2.2 – Configured Interfaces	16
Subtask 2.2.1 – Munis Financial Management System – General Ledger	16
Subtask 2.2.2 – Munis Financial Management System – Refunds	16
Subtask 2.2.3 – Meter Reading –Itron MVRs	16
Subtask 2.2.4 – Third Party Bill Print and Notices.....	17
Subtask 2.2.5 – TWI Interactive Voice Response system – Inbound and Outbound.....	17
Subtask 2.2.6 – ERP Document Management System.....	17
Subtask 2.2.7 – US Bank ACH payments	17
Subtask 2.2.8 – Collection Agency.....	17
Subtask 2.2.9 – Boone County – Water District Interface	18
Subtask 2.2.11 – Boone County Electric Interface	18
Subtask 2.2.12 – Wasteworks Landfill Charges Import.....	18
Subtask 2.3 – Software Modifications	18
Subtask 2.3.1 – Winter Average Volume Calculation Enhancement	18
Subtask 2.3.2 –Contingency	19
Exclusions.....	19
Task 3 - Implementation Approach.....	20

Subtask 3.1 – Phase 1 – Project Initiation	20
Subtask 3.2 – Phase 2 – Functional and Data Conversion Discovery Analysis	21
Subtask 3.2.1 – Functional Discovery Analysis Workshops	22
Subtask 3.2.2 – Data Conversion Analysis Workshop	23
Subtask 3.3 – Phase 3 – Interface/Modification Discovery & Specification	23
Subtask 3.4 – Phase 4 – Other Discoveries	25
Subtask 3.4.1 – Reports Discovery	25
Subtask 3.4.2 – Bill Print Discovery	25
Subtask 3.5 – Phase 5 – Configuration and Conversion	25
Subtask 3.5.1 – Initial Configuration and Conversion	25
Subtask 3.5.2 – Subsequent Data Refreshes	26
Subtask 3.6 – Phase 6 – Core Team Training	27
Subtask 3.7 – Phase 7– Reports Development and Delivery	27
Subtask 3.8 – Phase 8 – Interface/Modification Delivery	28
Subtask 3.9 – Phase 9 – Software Testing	29
Subtask 3.10 – Phase 10 – End User Training	31
Subtask 3.11 – Phase 11 – Go/No Go Criteria	31
Subtask 3.12 – Phase 12 – Transition to Live	32
Subtask 3.13 – Phase 13 – Post Go Live	33
4.0 Optional Items	34
Subtask 4.1 – Infinity.Link Discovery & Configuration	34
Schedule 1 – Fee Structure and Services Payment Milestones	35
License Payment Milestones	36
Service Payment Milestones	36
Appendix A – Draft Project Schedule based on this Scope of Work	38
Appendix B – Table of Responsibilities for Deliverables	39
Appendix C – Sample Communication Plan	43
Appendix D – Sample Change Order	44

Introduction

The project is defined as the provision of the CIS Infinity comprehensive customer information and billing software by Harris' Advanced Utility Systems ("Advanced"), to the CITY OF COLUMBIA, MO ("CITY"), for its customer information system (CIS) replacement. The CITY, at its option, may choose to also implement Infinity.Link.

The project as outlined in this Scope of Work (SOW) encompasses all aspects of the CIS Infinity implementation, including but not limited to project management, data conversion, software control file configuration, interfaces, modifications and training.

CIS Infinity will replace the current Sungard/H.T.E utility billing system in use by the CITY. CIS Infinity will be installed and configured to meet the customer information and billing needs identified by the CITY.

Background

The CITY has made the decision to replace its legacy customer information system. The current utility billing system provided by SunGard/HTE will be replaced with a new CIS that is consistent with existing and planned customer service business processes and technology. The CITY currently manages customer account data through an application running on an IBM AS/400 iSeries platform.

The CITY bills approximately 60,000 customers monthly. Primary services include Water, Electric, Refuse, Storm Water, Sewer, Street Lights, and Dusk- To-Dawn Lights.

Objectives

The CITY will replace its existing system with a customer-centric CIS product software solution. The solution will be functionally rich in the following areas:

- Account Management
- Billing Management
- Cashiering and Payments Management
- Credit and Collection Management
- Customer Management
- Customer Self Service
- Financial Management
- Meter Inventory
- Rates Management
- Service Order Management
- Usage Management

CIS Infinity is intended to address the following CITY objectives:

- **To provide exceptional levels of customer service.** The need for CITY to satisfy customers and provide exceptional levels of customer service is a primary objective and critical need of the CITY.

- **To provide for long-term stability of the customer information.** CIS Infinity will be stable and reliable with a product roadmap that shows future support and enhancements. CIS Infinity will be supported by Advanced, easily configurable and upgradeable, meeting the CITY's business needs for the foreseeable future.
- **To provide for integration across business systems.** CIS Infinity will interface with other applications, current and future, through standard integration techniques.
- **To provide for accommodating growth through technology.** CIS Infinity will be based on current technology.
- **To provide innovation and excellence.** CIS Infinity will provide a foundation to meet intermediate and longer-term needs for innovation and excellence in serving the customer and providing cost-effective, environmentally sound service.

Points of Contact

Primary Point of Contact (POC) - CITY

Name: Ron Barrett
Title: Financial Project Manager
Organization: CITY OF COLUMBIA
Address: 701 E. Broadway, Columbia, MO 65205
Phone: (573) 874-7371
Mobile: (573) 356-9447
Email: ron@gocolumbiamo.com
Website: <http://www.gocolumbiamo.com/>

Other Contact(s)

Name: Tony St Romaine
Title: Executive Sponsor
Organization: CITY OF COLUMBIA
Address: 701 E. Broadway, Columbia, MO 65205
Phone: (573) 874-7721
Email: tony@gocolumbiamo.com

Name: Scott Eiler
Title: Project Director
Organization: Plante Moran
Address: 27400 Northwestern Highway, Southfield, MI 48037
Phone: (248) 223-3447
Email: scott.eiler@plantemoran.com

Primary Point of Contact (POC) - Advanced

Name: TBD*
Title: Project Manager
Organization: Advanced Utility Systems
Address: 2235 Sheppard Ave. East Suite 1400, Toronto, ON M2J 5B5
Phone: 416-496-0149 Ext TBD
Email: TBD*

*The anticipated start date for the CIS phase of the CITY's ERP project is April 2015. Advanced, in consultation with the CITY, will name a project manager approximately two (2) months prior to the CIS project start date.

Other Contact(s)

Name: Terry Ridyard
Title: Executive Sponsor
Organization: Advanced Utility Systems
Address: 2235 Sheppard Ave. East Suite 1400, Toronto, ON M2J 5B5
Phone: 416-496-0149 Ext 256
Email: tridyard@advancedutility.com

Project Scope

The scope of this effort is to provide services to CITY to assist in the transformation of a new customer information system. In this regard, Advanced will provide the following services.

- Project Initiation and Management
- Installation of CIS Infinity, and optionally, Infinity.Link
- Discovery Analysis
- Configuration and Conversion
- Core Team Training
- Custom Reports Development and Delivery
- Interface and Modification Specification, Development and Delivery (exclusive of the non-CIS Infinity side of the interface)
- Software Testing
- End User Training
- Transition to Live
- Post Go Live Support

Definitions

Name	Definition
Modification	A change to the code base or a structural data model change.
Configuration	Changes to the software settings without source code or structural data model changes occurring.

Task 1 – Project Management

In consultation with the CITY, Advanced will assign a Project Manager (PM) for the management of this Scope of Work (SOW). A resume for the PM will be provided by Advanced. The CITY may request to interview the PM. The PM will meet with the CITY Project Manager to discuss the SOW and define the steps to be taken to perform the work. The CITY Project Manager will approve all deliverables and associated invoices for this task order, as well as providing oversight and guidance to ensure that completion of this task order meets the CITY's goals and budget.

Subtask 1.1 – Project Planning

Project Planning will consist of developing project control policies and procedures in accordance with standard industry practices for project administration, execution, and tracking. Advanced will coordinate a joint effort with the CITY to complete the Project Planning. Project Planning will include the following:

Project Schedule

Advanced will present a draft Project Schedule the week before the Project Kick-off for the CITY to review. A preliminary Project Schedule based on this Scope of Work is included in Appendix A. Following CITY approval, the Project Schedule will be used as a baseline for control of the project. Based on the CITY's approved changes, Advanced will be responsible for updates to the Project Schedule. The Project Schedule will be one project control mechanism used to manage, track, and evaluate Advanced's performance. Advanced will identify all tasks, deliverables, and appropriate milestones where the CITY information/activity is required and where timeline dependencies for subsequent Advanced activities within the Project Schedule exist.

Communication Plan

Advanced will coordinate a joint effort with the CITY to document the methods through which communication will take place during the CIS implementation project. There will be weekly and monthly review meetings, monthly reports, and monthly sponsor review meetings. An escalation process and several communication tools within these processes will be updated to ensure a clear understanding of the project standing relative to an on-time, on-budget delivery. The frequency of these meetings will be scheduled with the CITY and Advanced PM's during the kick off meeting. See Appendix C for a sample Project Communication Plan.

Change Management Plan

Advanced will coordinate a joint effort with the CITY to document the approach to effectively prepare the CITY for the changes to the organization resulting from the implementation of the software. The Change Management Plan will document the internal and external communication approaches to be used by the CITY to keep employees and customers informed of changes throughout the project.

Test Plan

Advanced will coordinate a joint effort with the CITY to document the overall testing approach for the four testing phases: Conversion, Functional, Integration, and User Acceptance testing. A Test Matrix will be used to document the test scripts for the Integration and User Acceptance test phases, logging the

responsibility for testing, timing and the test results. For both the Functional and Conversion test phases baseline accounts will be used to compare legacy data to CIS Infinity.

Training Plan

Advanced will coordinate a joint effort with the CITY to document how users will be trained on the software taking into consideration the software configuration completed as a result of the Functional Discovery Analysis. The Training Plan will include training matrices that outline what users (technical, core team, and end users) will learn in each class and will describe course material.

Risk Management Plan

Advanced will coordinate a joint effort with the CITY to document project risks. The Risk Management Plan provides a single, comprehensive process to identify, control and monitor risks and/or issues ensuring timely and effective resolution. This process helps reduce the time and effort required for risk/issue resolution. It outlines risk/issue ownership, decision-making authority and accountability. The risk management plan also improves communication of risks/issues and their resolution.

Advanced and CITY Roles and Responsibilities

Advanced will coordinate a joint effort with the CITY to identify Advanced and the CITY's human resource needs and how they will be used to accomplish tasks. A preliminary Table of Responsibilities that identifies deliverables for which Advanced has responsibility and for which the CITY has responsibility is included in Appendix B.

Issues Management (CustomerWise)

During Project Initiation as described in Task 3.1, Advanced will provide an overview of CustomerWise, Advanced's online tool for documenting and tracking issues as part of the overall implementation. Each Core Team member will be enrolled in mycisinfinity.com, Advanced's on-line customer portal which provides access to CustomerWise. Each identified user will be provided with a user name and password. Prior to Core Team Training, The CITY will be trained on the use of CustomerWise. Project issues identified by the CITY will be logged in CustomerWise. Advanced project team members will also use CustomerWise to log any issues that they identify. The Advanced Project Manager will assign ownership and priority for each issue and monitor the status of each issue through to resolution. Outstanding issues will be reviewed during the weekly and monthly project status meetings. The CITY is responsible for testing fixes reported in CustomerWise and for confirmation of issue closure.

Change Order Process

Advanced will coordinate a joint effort with the CITY to document a Change Order process. The Change Order process will identify how changes are initiated and their impact on the project will be identified, documented and communicated to the CITY. Appropriate sign-off channels will be developed for Change Order approval. A sample Change Order form is included in Appendix D.

On Site Project Facilities

The CITY will provide desk space for the Advanced team members while on-site at the CITY. The CITY will provide access to; printers within the facility, all network drives required for the shared project

resources, project servers, all instances of the software and full external internet access, (wireless preferred) for each Advanced team member including unimpeded access to Advanced's VPN. The CITY will make available meeting spaces as required for project meetings. Meeting spaces should be equipped with a white board and markers, flip chart, LCD projector, conference phone and internet connection.

Advanced will work within the CITY's access policy guidelines to access the CITY's core IT systems.

The CITY shall establish a training/testing room that will provide space, computers (with necessary software) and access to the software for the number of users specified in the contract plus one for Advanced. The training room will be equipped with a white board and markers, flip chart, LCD projector, conference phone and internet connections.

Subtask 1.1 – Deliverables

Subtask 1.1 Deliverables	• Draft Project Schedule • Communication Plan • Change Order Process • Change Management Plan • Test Plan • Training Plan • Risk Management Plan
-------------------------------------	--

Subtask 1.2 – Status Reports

Advanced will have weekly meetings with the CITY team to discuss work in progress, issues, actions, etc. Advanced will provide a weekly status report documenting these exchanges. Advanced will also provide a monthly summary of project progress, including significant issues resolved and significant issues raised.

Invoices will be issued as per the fee structure and service payment milestones in Schedule 1.

Subtask 1.2 – Deliverables

Subtask 1.2 Deliverables	• Weekly Team Meeting • Weekly Status Report • Monthly Invoice • Monthly Project Progress Summary
-------------------------------------	--

Subtask 1.3 – Monthly Sponsor Review

Advanced will prepare a Monthly Sponsor Review to be attended by project management and project sponsor staff from both the CITY and Advanced. The Monthly sponsor review meeting will review progress to date, future actions, and will validate, on a monthly basis, that the go-live date is still achievable for both parties. The dates for these meeting will be determined by both CITY and Advanced PMS.

Subtask 1.3 – Deliverables

Subtask 1.3 Deliverables	• Monthly Sponsor Review
-------------------------------------	--

Task 2 – CIS Infinity Interfaces and Software Modifications

This task covers the development and configuration of CIS Infinity interfaces to existing CITY systems and modifications to CIS Infinity, and/or related products in the Infinity product suite, if any, to meet the CITY's CIS needs. All development work completed by Advanced will be communicated, in advance, to the CITY Project Manager so that the CITY Project Manager has visibility to all Advanced interface development work.

Advanced will document the status of development, whether conducted by the CITY or Advanced, in the weekly status reports.

Subtask 2.1 – Modified Interfaces

The following group of interfaces will require development efforts from Advanced, and potentially CITY staff or a third party vendor, to support the specific interface requirements. At a minimum, the CITY will provide third party vendor contact information to Advanced and assist Advanced with coordinating interface discussion with third party vendors. Advanced will analyze, specify, develop, Q/A, and deploy the following group of interfaces required by the CITY under this SOW. The specific system modifications required to support a specific interface will be determined during the Interface/Modification Discovery process. Advanced will create detailed combined **Functional/Technical Specifications** for each interface requiring development effort from Advanced's technical staff.

Subtask 2.1.1 – ESRI Geographic Information System (GIS)

The CITY requires a two-way interface between CIS Infinity and the CITY GIS system which utilizes ESRI ArcGIS products. This two-way interface will provide access to GIS information from CIS Infinity, and provide CIS Infinity data for presentation in the GIS system.

- i. Using dynamic hyperlink functionality users of CIS Infinity will be able to access GIS information related to a specific service address. Any data element (or combination of data elements), such as GPS coordinates or premise number on the Main Customer/Account Inquiry can be linked to the GIS application.
- ii. Using web services or SQL views, the CITY can retrieve data from CIS Infinity for presentation in the GIS application.
- iii. Using web services or interface tables, new service information from the GIS system will be updated in CIS Infinity in real time. This information includes parcel number, service address, property owner information and other key determinants received from the GIS system. Accounts will automatically be created in CIS Infinity.
- iv. Initiation for actions in CIS Infinity from GIS. Using Web services or interface tables, multiple accounts selected in the GIS system can have CIS actions generated for them, such as letters, tasks, service orders, outbound dialing.
- v. For addresses added within CIS Infinity, a real time verification of the service address against the GIS database will be performed using Web services or another method. A warning will be displayed to the CSR if the service address does not exist in the GIS database. The CSR can override the warning if allowed by system configuration. An exception report will be developed to review/correct these addresses.

The specific system modifications required to support the various components of the GIS interface will be determined during Interface Discovery - Subtask 3.3.

Subtask 2.1.2 – MUNIS Master Customer Database

The CITY requires a two-way interface between CIS Infinity and the MUNIS system to establish a master customer database that will update customer-related information in CIS Infinity from the MUNIS system. The specific touch points for this interface will be determined based on further discussion.

This interface is expected to be a post-CIS Infinity live deliverable.

Subtask 2.1.3 – Tyler Incident Management Interface

The CITY requires an two-way interface between CIS Infinity and the Tyler incident management system to generate service order requests in CIS Infinity. The interface will utilize the interface (UTL) table or web services API framework.

Specific integration points for the interface are as follows:

- Creation of a service order request in CIS Infinity. Based on the type of customer incident received in the Tyler incident management system, a service order of a specific type will be generated within CIS Infinity. This interface touch point will also support additional action items (e.g. task, note, letter) being optionally generated in addition to a service order.
- Return of applicable information about the service order, such as creation and/or completion details, from CIS Infinity to the Tyler incident management system.
- Depending on the type of service order generated, CIS Infinity may invoke the CIS Infinity/Munis work order management interface in order to generate work order in the Munis work order system.

Subtask 2.1.4 – Outage Management System

The CITY requires the ability to access customer, service address, service and customer status information within their Outage Management System (OMS) from the CIS Infinity database using real time, ODBC database views. Advanced will create views to present this information for use by the OMS.

Subtask 2.1.5 – Munis Work Management System

The CITY requires a two-way near real time interface between CIS Infinity and the Munis work order system. The interface will utilize the existing interface table framework with other work order management systems.

For designated service order types which originate in CIS Infinity, all applicable information (e.g. originator, date, and type of service order, completion options, scheduling and assignment, and other fields required to be shown on the work order) will be passed from CIS Infinity to Munis, where a service request or work order is generated. Upon completion of the service request or work order, information is then sent back to CIS Infinity from Munis including status, scheduling, assignment, completion information and any comments or notes to be added to the customer account. Meter installation and exchange information and updates to asset characteristics (e.g., changes to stop measurements or material type) will also be received from Munis and processed in CIS Infinity.

Similarly for work orders initiated in Munis that relate to work on a customer-related asset (service, meter, or AMI device) a CIS Infinity service order will be created. All applicable information (e.g. originator, date, and type of service order, completion options, scheduling and assignment, and other required fields) will be passed from Munis to CIS Infinity. Upon completion of the service request or work order, information is then sent back to CIS Infinity from Munis to update the CIS Infinity service order including status, scheduling, assignment, completion information and any comments or notes to be added to the customer account.

This interface can also be used when information in CIS Infinity has changed, such as customer and account information, etc. The changed record is sent to Munis upon saving the record within CIS Infinity.

Advanced will enhance the existing CIS Infinity functionality to support the specific requirements of the CITY. The specific system modifications required to support the Munis work order interface will be determined during the interface discovery process.

This interface is expected to be a post-CIS Infinity live deliverable.

Subtask 2.1.6 – Tyler Cashiering

The CITY requires a real-time interface between CIS Infinity and the Tyler cashiering module. The interface will provide for real-time inquiry of CIS Infinity account information using the CIS Infinity web services API. It will provide the ability to search by name, street address or account number. Once a valid CIS Infinity account is found, then the following information about that customer/account will be retrieved: current balance, total past due amount, cash only comments, links to payment agreements and collection status.

For payments entered into Tyler cashiering that pertain to utility billing, and which Tyler has authorized with the payment processor if applicable, the interface will provide for real time creation of pending payments in CIS Infinity via the CIS Infinity web services API. These pending payments can be adjusted or voided as a result of adjustments in Tyler based on a unique external reference ID. A schedulable process within CIS Infinity will create payment batches within CIS Infinity based on these payment records. CIS Infinity will not interface with the payment processor for payments received through the Tyler cashiering system/.

The specific system modifications required to support the Tyler cashiering interface will be determined during the interface discovery process, to take place early in the project.

Note: The CITY has identified the need for a future one-way interface between CIS Infinity and the Tyler EnerGov permitting system to exchange new premise, service and occupancy information. Due to timing of the Go Live dates for the respective applications, this interface is *NOT* included in this Scope of Work. It is anticipated that the interface will utilize either the interface (UTL) table or web services API framework.

Specific integration points for the interface are as follows:

- Creation of a new account and services in CIS Infinity. When a permit is issued, EnerGov will populate information about the new account, such as expected services, impervious square footage, heat source, load management devices, and other available information. Based on this information, CIS Infinity will create a new account record, with assigned services and default bill codes based on account type and services.
- Creation of an action (e.g. task, service order, note) in CIS Infinity. As part of the interface, EnerGov will indicate a specific action item to be generated. Based on this information, CIS Infinity will generate an action (e.g. a task) for follow-up within CIS.

Subtask 2.2 – Configured Interfaces

The following group of interfaces will be configured using CIS Infinity configuration. Information can be exported and imported on a scheduled basis using the Export/Import Processing Form.

Specifications will not be produced for configurable interfaces. These items are not considered core interfaces as they are configured rather than programmed into the system. Configurable interfaces are typically configured using the built-in Advanced Interface Manager configuration tool. Advanced will configure the following interfaces:

Subtask 2.2.1 – Munis Financial Management System – General Ledger

The CITY requires a one-way interface to export general ledger information from CIS Infinity to the Munis general ledger module.

The General Ledger interface will export in batch a text file containing summarized general ledger journal entries for updated billing, cash and cash adjustment batches from CIS Infinity to the General Ledger module. The Advanced Interface Manager will transfer summarized general ledger information to the General Ledger application as un-posted journal entries where they can then be processed. The general ledger information transferred contains details about the originating batch in CIS Infinity for cross-referencing purposes.

The CITY requires a one-way interface to retrieve information from CIS Infinity from the Munis general ledger module, specific to utility billing transactions originating in CIS Infinity. Using views or web services, a user of the Munis general ledger module will have the ability to see information relating to a general ledger transaction that originated from CIS Infinity, such as customer/account and transaction details.

Subtask 2.2.2 – Munis Financial Management System – Refunds

The CITY requires a one-way interface to export accounts payable information for customer refunds from CIS Infinity to the Munis accounts payable module.

The Accounts Payable interface will export a text file containing customer and refund amount information for the purposes of issuing refund checks to customers in the Accounts Payable module. Refund check transactions would be based on the existing refund transactions configured in CIS Infinity. This will be a periodic batch process.

Subtask 2.2.3 – Meter Reading –Itron MVRS

The CITY requires a two-way batch file interface between CIS Infinity and the CITY Itron MV-RS meter reading software.

The interface will export account and meter related information from CIS Infinity to Itron MV-RS. The interface will support the import of the meter data reads, meter notes, comments and trouble codes for billing purposes. Both the export and the import files will be configured using the standard Itron MV-RS formats.

Subtask 2.2.4 – Third Party Bill Print and Notices

The CITY requires an interface to export text files of information required by their third party bill print and notice provider (TBD) to generate customer bills and collection notices. An electronic file will be created to export in a standard format, from CIS Infinity, all billing information required by the third party vendor.

Subtask 2.2.5 – TWI Interactive Voice Response system – Inbound and Outbound

The CITY requires a two-way real-time interface between CIS Infinity TWI IVR for inbound customer calls and a batch interface to TWI for outbound customer calls.

CIS Infinity will provide customers with a real-time interface into the IVR, allowing customers to hear their utility account balance, check payment history, and make payments to their account, which are then reflected real-time in CIS Infinity. This will be done utilizing the Infinity Teleconnect Web services API.

For outbound calls, CIS Infinity will be configured to support exporting a file containing customer call data for a specified group of customers that can be imported and processed by IVR. CIS Infinity currently contains functionality to export outbound customer call files using a configurable file format defined using the Advanced Interface Manager.

Subtask 2.2.6 – ERP Document Management System

The CITY requires an interface between CIS Infinity and a Document Management System (DMS). This interface will provide access to documents stored in the DMS from CIS Infinity.

Using dynamic hyperlink functionality, any data element (or combination of data elements), such as account number or parcel ID, on the Main Customer/Account Inquiry can be linked to the DMS application. Clicking on a linked data element will call a Web page created by the CITY displaying DMS information specific to the linked data element.

Subtask 2.2.7 – US Bank ACH payments

The CITY requires a one-way interface to export a file of customers signed up for ACH payments to US Bank. CIS Infinity currently supports the exporting of standard ACH files that conform to NACHA standards.

Subtask 2.2.8 – Collection Agency

The CITY requires a two-way batch file interface with a collection agency to export collection data from CIS Infinity and to import payment information from the collection agency into CIS Infinity.

The export file will contain account, balance and collection information for accounts that qualify to be sent to the agency. The import file will contain payments received by the collection agency with payment details such as account number, payment date and payment amount (net and gross).

CIS Infinity currently contains functionality to export information to a collection agency using a configurable file format defined using the Advanced Interface Manager. This information can be exported on a scheduled basis using a batch generated by the Collection Agency/Write-off Pickup Process.

CIS Infinity currently contains functionality to import payments received by a collection agency using a configurable file format defined using the Advanced Interface Manager.

Subtask 2.2.9 – Boone County – Water District Interface

The CITY requires a two-way batch file for export/import between Boone County Regional Water Districts 1, 4, and 9 and CIS Infinity to export customer account number, account name, address, sewer base charge, sewer volume charge, trash, storm water charges, late fees and interest while allowing for importing of customer account number, account name, address, water consumption, amount collected and billing period. This is to allow for billing of monthly non-meter related charges while collecting water consumption to calculate the annual winter quarter average sewer volume usage. The interface will export/import, on a monthly basis, consumption details for these cycle 99 (non-metered) accounts.

Subtask 2.2.10 – Boone County Sewer District - Export

The CITY requires a one-way batch file for export between Boone County Regional Sewer District and CIS Infinity to export customer account number, account name, address, meter number, water consumption and billing information.

Subtask 2.2.11 – Boone County Electric Interface

The CITY requires a two-way batch interface for export/import purposes between Boone Electric and CIS Infinity. The export interface will generate a file, for the designated customers, containing customer, account and information sufficient for customer billing purposes. The import interface will import an file containing payment information for payments received for customers billed by Boone Electric.

Subtask 2.2.12 – Wasteworks Landfill Charges Import

The CITY requires a one-way batch interface to import a file of landfill charges from the WasteWorks landfill billing system. This interface will import landfill charge information into CIS Infinity, so that the customers can be charged landfill charges based on waste disposition.

In the event that additional interfaces are identified during the Discovery process, the jointly developed Change Order process as defined in Subtask 1.1 will be followed.

Subtask 2.3 – Software Modifications

Advanced will analyze, specify, develop, Q/A, and deploy the following modifications required by CITY under this SOW. Advanced will identify the specific development efforts required to support these modifications during the Interface/Modification Discovery and Specification Phase. Advanced will create detailed combined **Functional/Technical Specifications** for each modification requiring development effort from Advanced's technical staff.

Subtask 2.3.1 – Winter Average Volume Calculation Enhancement

The CITY requires a modification to CIS Infinity to support the ability for the Winter Average Volume process to perform a secondary recalculation. CIS Infinity will be enhanced with the ability to optionally recalculate the winter average volume for an account, if the original calculation results in a value below the required threshold.

Subtask 2.3.2 –Contingency

Contingency hours (one hundred forty-five (145) hours have been reserved for additional requirements that may be identified during implementation.

In the event that additional modifications are identified during the Discovery process, the jointly developed Change Order process as defined in Subtask 1.1 will be followed.

Exclusions

The following has been excluded from this Scope of Work, unless noted otherwise:

1. Rate Structural Changes

Advanced will provide normal rate updates throughout the course of the implementation at no extra charge providing the rate change occurs during the implementation timeframe. Advanced will not support a rate change that departs substantially from the current rate structures that are in force at the time of contract signing and/or as documented in the Functional Discovery document. Any substantial change in rates methodology and deployment will be considered out of scope and will be subject to a Change Order.

2. Third Party Payment Processor

Internet payment processing and payment clearing is provided, at no extra license fee, for Infinity.Link and applicable CIS Infinity functionality via the Harris Payment Gateway (HPG). Currently the CITY requires an interface to TWI – Summation 360 who is an HPG partner. There is no cost to interface to TWI payment processor. An interface to a non HPG payment provider is considered customized development. The development of a real time third party interface for payment processing to a payment processor is a minimum thirty thousand dollar (\$30,000) development fee and an annual maintenance fee of twenty-five percent (25%). Based on the actual third party payment interface the fees may be higher.

Task 3 - Implementation Approach

This task covers the implementation approach Advanced will take to replace the CITY's current CIS with Advanced's CIS Infinity software. Advanced will implement a phased approach in the lifecycle of this task order as described herein.

Subtask 3.1 – Phase 1 – Project Initiation

Subtask 3.1		
Start	End	Duration
Week -	Week -	- weeks

The Advanced PM will work with the CITY Project Manager and staff to organize project information for the joint preparation of the Project Schedule (see Task1). The Advanced PM will be onsite to organize and present all of the information required to start the project and will, at a minimum, address the following areas:

- Project Schedule, including but not limited to the, Communication Plan, Risk Plan, Change Management Plan, Training Plan and Test Plan
- CIS Infinity server software installation and desktop installation rollout
- Training Course Syllabus for Core Team, Technical Team, and End User Training (part of the Training Plan)
- CustomerWise set-up and overview
- Access to CIS Infinity Entity Relationship Diagram and Data Dictionary
- Project Team Contact List which includes users that need access to CustomerWise
- Overview of the operations of CIS Infinity via WebEx or similar media
- Functional and Data Conversion Discovery agendas delivery and review

The Advanced PM is the primary PM. The Advanced PM will operate the daily activities of the project and work in conjunction with the CITY's Project Manager and staff to ensure effective management of staff resourcing, forward planning initiatives and day to day project deliveries.

Subtask 3.1 – Deliverables

Subtask 3.1 Deliverables	• Conduct Project Kickoff Meeting • Initial Project Schedule, including but not limited to the, Communication Plan, Risk Management Plan, Change Management Plan, Training Plan and Test Plan • Software Installation, Installation Training and Installation Report • Training Course Syllabus • CustomerWise Overview • Access to the Data Dictionary
---------------------------------	--

	• Access to the Entity Relationship Diagrams • Project Team Contact List • CIS Infinity System Overview • Functional and Data Conversion Discovery agendas delivery and review
--	---

Subtask 3.2 – Phase 2 – Functional and Data Conversion Discovery Analysis

Subtask 3.2		
<i>Start</i>	<i>End</i>	<i>Duration</i>
Week -	Week -	- weeks

Advanced will review the detailed data and business rules and requirements of the CITY. This analysis will provide an association between CITY's business practices and the required CIS Infinity configuration.

The Functional and Data Conversion Discovery Analysis phase will be led by Advanced and broken out into functional and data conversion workshops. The workshops review the functional and data conversion areas of the system and are the basis for how Advanced will configure, and convert all of the required business functions, business logic and data in the system. Prior to beginning both Functional and Data Discovery, Advanced will provide Overview training to the CITY's core team.

Prior to the start of the Functional and Data Conversion Discovery Analysis phase, the CITY will gather the following information in preparation for the sessions, if documentation is available:

- All rate tariffs and system generated fees, including periodic (monthly, quarterly etc.) non metered parking fees
- Chart of Accounts for GL/AP interfacing
- Meter Reading process flow, vendor and file layout
- All required service order information
- File layouts for all required interfaces
- Sample of current bill prints, notices, door hangers and letters
- All payment types received and any associated payment information
- Process flows of penalties, collections, disconnections, bankruptcy and write offs
- Process flows of move in, move out process
- Billing process flow
- All Daily, weekly, Month End and Year End Report Requirements
- All energy efficiency loan information
- Information and process flow for new construction
- Information and process flow for backflow device monitoring and billing
- All information on transformer-meter parent-child relationships and overload parameters
- All information on load management devices

Subtask 3.2.1 – Functional Discovery Analysis Workshops

Advanced will conduct onsite **Functional Discovery Analysis Workshops**. These workshops will be led by Advanced to appropriately review and confirm all required information for the areas listed below. Advanced with the CITY will identify the necessary CITY staff needed to attend these workshops two to four weeks in advance. Reports and Bill Print discoveries as outlined in Subtask 3.4 will be separate from the main functional discovery workshops and will be conducted at a time indicated in the Project Schedule.

Advanced will create a **Functional Discovery Document** that will include, at a minimum, the following areas:

1. Foundation

Review of all of the basic system set up areas and logical business rules including but not limited to account types, services, account number structure and customer number structure.

2. Customer Information

Review of addresses and phone numbers, lookups and address and occupancy types, multi-service customer consolidation, etc.

3. Meters and Meter Inventory

Review of meter types, meter inventory process and controls, manufacturers, units and other pertinent meter information.

4. Billing

Review of the entire meter reading to billing process with a review of all processing including weather based estimation logic and exceptions reporting.

5. Rates

Review of the rate tariff and functional requirements for setting up rates, seasonal rates, summer average calculations, temporary rates, proration, taxes and any rate rebates or discounts.

6. Cashiering

Review of all payment types, interfaces, automated clearing house, endorsements, receipts and unapplied payments processing.

7. Collections

Review of all collections procedures, payment arrangements, exemptions, penalties, notices, disconnections, agency, add to tax/liens, tax certification, bankruptcy and write-off processes including all applicable fees.

8. Move in Move Out

Review of the process flow and all applicable setups, fees and follow up processes with the move in move out process.

9. Customer Service

Review of functions within the software such as new service creation, donation plans, discounts and special service offerings/community service functions.

10. Accounting

Review of General Ledger Setup and chart of accounts for GL/AP processing and refund processing. Review of Year and month end closing including reporting requirements.

11. Service Orders

Review of requirements for full service order processing and follow up actions control.

12. Loans

Review of the process flow and all applicable setups and follow up processes for billing of energy efficiency loans.

13. New Construction

Review of new construction process to identify all interfaces, work-flow, payments and authorizations which impact utility billing.

14. Backflow

Review of the process flow and all applicable setups, fees and follow up processes with the backflow device tracking functionality.

15. Transformer Loading

Review of the process flow and all applicable setups and follow up processes with the transformer loading functionality.

Subtask 3.2.1 – Deliverables

Subtask 3.2.1 Deliverables

- Functional Discovery Workshop
- Functional Discovery Document

Subtask 3.2.2 – Data Conversion Analysis Workshop

In addition to Functional Discovery Analysis Workshops, Advanced will conduct an onsite **Data Conversion Discovery Analysis Workshop**. From this workshop Advanced will produce a **Data Conversion Plan**. The data conversion analysis workshop will be led by Advanced to appropriately review and confirm all required information for these areas. Advanced will identify the CITY staff needed to attend these workshops two weeks in advance.

Advanced will work with the CITY to determine how to convert the existing legacy data into CIS Infinity. A full explanation of the process and definition of standard data validation parameters, as well as any site-specific data validation parameters will be reviewed and adopted. Data validation criteria and a data map are presented and reviewed jointly by Advanced and the CITY. The Data Conversion Plan will include the data mapping document and data validation parameters.

Subtask 3.2.2 – Deliverables

Subtask 3.2.2 Deliverables

- Data Conversion Workshop
- Data Conversion Plan

Subtask 3.3 – Phase 3 – Interface/Modification Discovery & Specification

Subtask 3.3		
Start	End	Duration
Week -	Week -	- weeks

Advanced will conduct an onsite **Interface/Modification Discovery Analysis Workshop**. Advanced will provide a **Discovery Agenda** and identify necessary CITY staff needed to attend this workshop two weeks in advance. Advanced will review with the CITY all interfaces and modifications identified in Task 2, to be programmed in CIS Infinity. Advanced will review the specification process and map out the timeline required to complete the specifications, coding, Q/A, deployment, and testing. Below are the minimum topics that will be covered:

- Data source(s) identification; obtain data dictionaries, table relationships, etc.
- Method of moving the data between databases, including the format the data might be in, during the move (e.g., XML, ASCII, staging tables, DTS, etc.)
- Direction of dataflow and frequency of data exchange
- Data validation efforts needed, if any
- Error handling
- Document data mapping from one database to another
- Requirements analysis

Advanced will produce a **Functional Specification Document** and **Technical Specification Document** for review and acceptance by CITY.

Each specification will outline the following:

- Document Overview
- Revision History
- Functional/Technical (as appropriate) Summary
- Process Overview
- Functional/Technical (as appropriate) Modification
- Impact to System Operation
- Questions

Advanced will conduct a review of the documentation with the CITY remotely to make any changes to the specifications.

Subtask 3.3 – Deliverables

Subtask 3.3 Deliverables	• Interface and Modification Discovery Agenda • Interface/Modification Discovery Workshop • Functional Specification Document • Technical Specification Document
-------------------------------------	---

Subtask 3.4 – Phase 4 – Other Discoveries

Subtask 3.4.1 – Reports Discovery

Advanced will conduct an onsite **Reports Discovery Workshop** to review the CITY's CIS Infinity reporting requirements. The discussion will include searches, querying, and a review of CIS Infinity's standard reports.

Advanced will outline all the required base reports including but not limited to auditor's, rates, revenue, and cash reports in a Reporting Matrix as identified in Subtask 3.7.

Any required report that does not have a standard report match is considered a custom report and the CITY will need to provide the logic to complete these reports. A custom report that has not been identified as part this SOW will be considered out of scope and will follow the Change Order process as identified in Subtask 1.1. This section covers only reports driven out of CIS Infinity and does not cover reports required from 3rd party vendors' software.

Subtask 3.4.1 – Deliverables

Subtask 3.4.1 Deliverables	• Reports Discovery
-----------------------------------	---

Subtask 3.4.2 – Bill Print Discovery

Advanced will conduct a remote **Bill Print Discovery Workshop**. This workshop will be led by Advanced to review of all bill print types/notices/receipts and to provide input to assist the CITY with bill print redesign.

CITY outsources its bill print to a third party vendor. Advanced will replicate the third party vendor's layout for the bill print, so that CITY can re-print these documents in house if desired. Advanced will produce a **Bill Print Specification** for review and acceptance by CITY.

Subtask 3.4.2 – Deliverables

Subtask 3.4.2 Deliverables	• Bill Print Discovery Workshop • Bill Print Specifications
-----------------------------------	---

Subtask 3.5 – Phase 5 – Configuration and Conversion

Subtask 3.5.1 – Initial Configuration and Conversion

Subtask 3.5.1		
Start	End	Duration
Week -	Week -	- weeks

The CITY will provide a data extract to Advanced that will be loaded into a development database located at Advanced's office. Advanced will convert the CITY's data so that it can be loaded into CIS Infinity. Configuration and conversion are tightly integrated in CIS Infinity. Advanced will create validated

mapping that ties existing customers' rates to their accounts. Advanced will develop a conversion routine to reflect the requirements of the CITY. The following data files will be converted:

- Customer masters & services associated with each customer
- Customer billing and adjustment history for current and 5 years of history
- Customer payment history for five (5) years
- Reading/consumption history for five (5) years
- Meter and backflow inventory
- Meter directions and read sequence information
- Deposit information
- Location information
- Credit history information
- Miscellaneous customer information
- Customer payment plan information
- Customer letter codes and information

Advanced's Conversion Specialist will prepare the **Initial Data Conversion and Configuration** to be delivered and loaded onsite. The results for the **Data Validation** parameters specified in the Data Conversion Plan will be included for review by the CITY.

Advanced will assist the CITY in identifying **Baseline Accounts** which are a representative cross section of the CITY customers (e.g. rates, customer type, energy efficiency loans, backflow, transformer inventory with meter relationships, etc.). The baseline accounts will be used to test both the validity of the converted data and that the configuration begins to conform to the Functional Discovery document. The CITY will provide results from testing through the CustomerWise tool which tracks all anomalies.

Subtask 3.5.1 – Deliverables

Subtask 3.5.1 Deliverables	• Initial Data Conversion Load • Identification of Baseline Accounts • Data Validation Results • Initial Configuration Rollout
---------------------------------------	---

Subtask 3.5.2 – Subsequent Data Refreshes

Advanced will conduct a series of data refreshes (minimum of 6, including Go Live), until the data conversion and configuration are Go Live ready.

Subtask 3.5.2 – Deliverables

Subtask 3.5.2 Deliverables	• Data Refreshes • Data Validations
---------------------------------------	--

Subtask 3.6 – Phase 6 – Core Team Training

Subtask 3.6		
Start	End	Duration
Week -	Week -	-weeks

The CITY core functional and core technical teams will be trained by Advanced to use CIS Infinity prior to starting functional testing. CIS Infinity Core Team Training covers all of the major system components. CIS Infinity Core Team training covers all of the major system components. End User training will use the CITY's data and the CITY's system configuration. Advanced will ensure that the CITY's data and correct configuration is installed on the training database before end user training has begun. A full training syllabus is provided in the Training Plan.

Training will show all aspects of CIS Infinity functions to introduce the CITY to alternative methods to operate the CIS system and to document and change some of the system processes performed within the CITY's legacy system. Training will accommodate up to 10 participants. CITY may choose to record the training sessions for internal use only.

During training sessions, the CITY will document any potentially new processes. Any system bugs, set up issues, conversion issues and deficiencies shall be entered in CustomerWise by the CITY. Advanced will assist the CITY with this process to ensure all items are documented through CustomerWise. Deficiencies can be entered into CustomerWise by the CITY's testers or Advanced's testers, any users who are given access to the system, and other personnel who may be involved during the Software Testing phases.

The Advanced PM will be proactive in the resolution of items logged in CustomerWise so as not to interrupt the continuity of testing. The Advanced PM will provide responses including analysis and level of effort to fix deficiencies. The Advanced PM or designee will document (in detail) any known work-around solutions and communicate these to the CITY's Project Manager.

Advanced is responsible for fully testing and correcting any deficiencies found during training. New builds that result from training deficiencies will be data validated by Advanced.

Subtask 3.6 – Deliverables

Subtask 3.6 Deliverables	• CustomerWise Training for software issue entry and tracking • Standard Training Documentation • Completion of onsite Instructor-Led Core Team Training
---------------------------------	--

Subtask 3.7 – Phase 7– Reports Development and Delivery

Subtask 3.7		
Start	End	Duration
Week -	Week -	- weeks

Reports identified as required by CITY in the Reports Discovery phase (Subtask 3.4.1) will be documented by Advanced using a **Reporting Matrix**. The Reporting Matrix will match the CIS Infinity

standard report names to each required report. Custom reports are also documented in the Reporting Matrix. Month-end and Year-end report requirements are included in this report matrix as well. A specification/mockup will be created for review and acceptance by CITY. Custom reports to be developed and delivered by Advanced, once sign off on specifications has taken place.

The following report enhancements were identified in the proposal and the cost was included in the modification section of the cost proposal:

Number	Application Requirements	Priority	Availability	Cost
365	Payment History , reporting bills and associated payments receipted by account. Shows dates, amounts, arrearages, penalties, account name, consumption, and address. Can be run for one account and allow user to view.	H	R	\$2,250.00
366	Customer Statistics Report , presenting customer characteristics including number of customers, number of customers by meter size and billing category (customer type), usage and revenue by meter size, usage and revenue by billing type code, date range, district, book, and by a combination of the above.	H	R	\$4,500.00
376	Billing Statistics (Rate Codes, Consumption Amt, Dollar Amt, Consumption & Demand charges broken out)	H	R	\$3,750.00
385	Surcharge billing & collection report	M	R	\$1,500.00
395	Ability to report on any residential customer who's summer usage is 80% of the 3 month average (for rate increase adjustments)	H	R	\$3,000.00

Subtask 3.7 – Deliverables

Subtask 3.6 Deliverables	• Reporting Matrix • Custom Reports Specification, Development & Delivery (if applicable)
---------------------------------	--

Subtask 3.8 – Phase 8 – Interface/Modification Delivery

Subtask 3.8		
Start	End	Duration
Week -	Week -	- weeks

Once the interface/modification has been developed by Advanced and successfully compiled, the CITY will be notified that the interface/modification is ready to be released and applied to the CITY's test environment through an executable or build. Advanced will roll out the modifications into the CITY's test environment remotely. Advanced will ensure that all Advanced development work is put through our QA process.

Subtask 3.8 – Deliverables

Subtask 3.7 Deliverables

- Deployment and Rollout of Modifications and Interfaces over the period of Integration Testing cycles.

Subtask 3.9 – Phase 9 – Software Testing

Subtask 3.9		
Start	End	Duration
Week -	Week -	- weeks

Advanced will support all software testing through a combination of onsite support, remote support and WebEx online support. Validated testing criteria will be used to determine if the testing phase is complete and the system is ready for the next cycle of testing. The Advanced PM will provide the CITY with generic test scripts. Modification of test scripts to match the CITY's specific business scenarios is the responsibility of the CITY. From the test scripts, the CITY will create an ITC Plan (Integration Testing Cycle), and User Acceptance Test (UAT) Plan.

At the start of each test cycle, a full data conversion using a fresh data extract will be performed to exercise the data conversion process and to update any required data fixes that are found through testing. With each data conversion Advanced will provide and the CITY will verify all balancing metrics that were agreed upon in the Data Conversion Discovery. Deficiencies found during the Software Testing Phase will be entered into CustomerWise for the correction of configuration, data conversion and/or system deficiencies. Deficiencies will be entered into CustomerWise by the CITY. CustomerWise maintains a history of analysis and problem resolution.

CustomerWise will be managed and maintained by the Advanced PM and will be reviewed in accordance with the Issue Management process with both Advanced and CITY staff to ensure the issues are being actively worked and tested. The Advanced PM will be proactive in the resolution of items logged in CustomerWise so that they will be resolved within a timely manner. The Advanced PM or designee will document (in detail) any known work around solutions and communicate it to the CITY Project Manager.

Advanced will provide a technical point of contact during all testing phases, Advanced will provide responses that include justification and mitigation plans where applicable.

The software testing phase is split into the following three test cycles:

1. Functional Testing

Functional testing will utilize the baseline accounts and testing scripts to confirm that the data conversion and basic functions in the system are working as expected. Individual accounts will be reviewed and will run through a full meter to cash process. In the review of these individual accounts, the CITY will be tasked with testing each rate element in the system and completing a rates testing matrix to confirm that the billing process works prior to starting a cycle billing process. This rate testing will be done against a series of baseline accounts and will look at each rate scenario and all of the associated proration activities that can affect a rate calculation.

Functional Testing is modular and does not test the system end-to-end.

Subtask 3.9.1 – Functional Testing Deliverables

Subtask 3.9.1 Deliverables	• Functional Test Data Conversion Load • Generic Test Scripts • Rates Testing Matrix
-----------------------------------	--

2. Integrated Testing Cycle (ITC)

ITC will utilize generic testing scripts and system scenarios to confirm that the data conversion and system processes are functioning as expected. ITC is broken down into two sub-phases.

- ITC1 is intended to exercise full scale testing of the system for meter reading, bill calculation, bill print, cash collections and collections processing. This will also involve testing the customer service functions within the system for items such as Move In and Move Out and service order processing.
- ITC2 emulates the same process with a refreshed data conversion set and any configuration changes that have been made to the system. Prior to the start of ITC2, another full rollout of data conversion and configuration review is performed onsite or remotely to ensure additional knowledge transfer to the CITY on how CIS Infinity is configured to meet CITY's business needs. Once the rollout is complete, testing of the system through ITC2 will commence to ensure that all system processes are performing as expected. Both ITC1 and ITC2 will have mutually agreed-upon performance and accuracy metrics and criteria to ensure the system is matching the expected results. These performance and accuracy metrics will be presented for approval to CITY Project Manager for adoption prior to starting User Acceptance Testing. ITC2 will incorporate testing of interfaces and modifications.

Subtask 3.9.2 – Integration Testing Deliverables

Subtask 3.9.2 Deliverables	• Integration Test Scripts • ITC1 Data Conversion Load • ITC1 Test Plan Outline • ITC1 Acceptance Criteria • ITC1 Plan Completion and Signoff • ITC2 Data Conversion Load • ITC2 Test Plan Outline • ITC2 Acceptance Criteria • ITC2 Plan Completion and Signoff
-----------------------------------	--

3. User Acceptance Testing (UAT)

The final phase of testing is UAT and starts with a code freeze. Only critical path items will be altered during this phase as agreed upon by both parties after analyzing the risk of introducing these changes. Once complete, the UAT constitutes acceptance of the system as ready for Go

Live. In combination with staff training readiness and organization readiness, the UAT and its acceptance help to drive the Go/No Go criteria that lock down the live date of the software.

Advanced will coordinate with the CITY to select the integration test scripts that will be used during UAT.

Subtask 3.9.3 – User Acceptance Testing Deliverables

Subtask 3.9.3 Deliverables	• UAT Data Conversion Load • UAT Test Plan Outline • UAT Acceptance Criteria • UAT Plan Completion and Sign Off
-----------------------------------	--

The Advanced PM will work with the CITY to ensure that test results for each testing phase provide evidence that CIS Infinity capabilities have been properly integrated and tested in the CITY's test environment. Advanced will work with the CITY to support performance tests.

Subtask 3.10 – Phase 10 – End User Training

Subtask 3.10		
<i>Start</i>	<i>End</i>	<i>Duration</i>
Week -	Week -	- weeks

Advanced will provide CIS Infinity End User training to the CITY to secure a working knowledge of CIS Infinity using acceptable adult learning principles. As part of the Training Plan, Advanced will work with the CITY to jointly create the appropriate Training Matrices (part of the Training Plan) that will identify classes and the Advanced and the CITY staff attendance needs.

Each End User training session will have an attendance sheet that matches the End User training schedule. Once each session is complete, the CITY will sign-off on a **Training Session Sign-off Form** signifying that the training session has been completed.

Subtask 3.10 – Deliverables

Subtask 3.10 Deliverables	• Completion of onsite Instructor Led End User Training • Training Session Sign-off
----------------------------------	--

Subtask 3.11 – Phase 11 – Go/No Go Criteria

Subtask 3.11		
<i>Start</i>	<i>End</i>	<i>Duration</i>
Week -	Week -	- week

Advanced will initiate a process of gauging system readiness that will be measured using jointly-defined Go/No Go Criteria by Advanced and CITY to determine if CIS Infinity is prepared for use in a production environment. The criteria will be agreed to by the CITY Project Manager and documented by Advanced in the **Go/No Go Criteria List**.

The following will be part of the process:

- Review system readiness
- Review staff readiness
- Review organization readiness

Subtask 3.11 – Deliverables

Subtask 3.11 Deliverables	• Go/No Go Criteria List • Review, Sign-off and Authorization
--------------------------------------	--

Subtask 3.12 – Phase 12 – Transition to Live

Subtask 3.12		
<i>Start</i>	<i>End</i>	<i>Duration</i>
Week -	Week -	- week

The Advanced PM will develop a **Cutover Plan** that details the steps and responsibilities for Advanced and the CITY to transition CIS Infinity to the CITY production (live) environment. The **Cutover Plan** will include but not be limited to the following items:

- Full emergency contact information
- Detailed steps and communications of when data extract is obtained and data conversion is returned
- Ordered steps for ensuring balancing of the system
- Determination of whether a test system is refreshed at the same time as production for any required process testing
- Post-cutover test plan and checklist
- Criteria that determine when the system will be turned over to end user staff
- A formal release that documents that the system has been handed to the CITY in full balance

The transition to live will have a new data conversion in which the data validation parameters, bill codes, rate mapping and transaction codes will all be approved by the CITY and the Advanced PM.

The cutover to live will occur over a weekend and will be coordinated by the Advanced PM and CITY staff.

Subtask 3.12 – Deliverables

Subtask 3.12 Deliverables	• Cutover Plan • Final Release Data Conversion Load • AR Balancing Sign Off • Data Conversion Validation Parameters sign off • Year and month active confirmation • AR summary details Sign Off • Transaction code Sign Off • Rates Sign Off
--------------------------------------	--

Subtask 3.13 – Phase 13 – Post Go Live

Subtask 3.13		
<i>Start</i>	<i>End</i>	<i>Duration</i>
Week -	Week -	- week

Advanced will assist the CITY throughout the post live implementation phase to identify and respond to any needs and concerns. During the Post Go Live period, Advanced will supply, as per the Software Implementation Services Agreement, a combination of onsite, remote, and WebEx online support to ensure System Acceptance and a smooth transition to support. During this phase of the project, the following items will be supplied to the CITY:

- Weekly PM and technical staff meetings to review all high-priority items.
- Combination of onsite and remote customer support.
- Full transition to support Audit (internal to Advanced).
- Introduction and transition to Support.
- Completion of post live interfaces; 2.1.2 – Munis Master Customer Database and 2.1.5 – Munis Work Management System

Throughout the Post Go Live period, the Advanced PM will continue to act as primary resource for all issues. Upon completion of the Post live support period, the CITY will transition to the Advanced's Customer Service and Support Department as per the Support and Maintenance agreement.

Subtask 3.13 – Deliverables

Subtask 3.13 Deliverables	• Completion of Post Go Live Support • Transition to Support • Completion of Post Live Interfaces (2.1.2 and 2.1.5)
--------------------------------------	---

4.0 Optional Items

The following services are optional and have been identified separately in Schedule 1. If CITY elects to have Advanced perform one or more of these services, Advanced will initiate the Change Order Process.

Subtask 4.1 – Infinity.Link Discovery & Configuration

Advanced will conduct a remote **Infinity.Link Discovery Workshop**. This workshop will be led by Advanced and will review CITY's Infinity.Link customer web requirements including a detailed review of CITY's business rules and technical environment.

Prior to the start of the Infinity.Link technical workshop, CITY will complete the **Infinity.Link Checklist** provided by Advanced.

Advanced will create an **Infinity.Link Discovery Document** that will include the Technical Checklist.

Subtask 3.4.3 – Deliverables

Subtask 3.4.3 Deliverables	• Infinity.Link Discovery Workshop • Infinity.Link Technical Checklist • Infinity.Link Discovery Document
-----------------------------------	---

Schedule 1 – Fee Structure and Services Payment Milestones

	Description	Quantity/ Hours	Cost
License Fees	CIS Infinity – Concurrent Users	25	\$187,500
	Infinity.Teleconnect – Site License	1	\$5,000
	Total License Fees		\$192,500
Services Fees	Project Management	700	\$105,000
	Discovery	500	\$75,000
	Data Conversion	600	\$90,000
	Configuration	1180	\$177,000
	Core & End User Training	800	\$120,000
	Interfaces	854	\$128,100
	Modifications (including Reports)	285	\$42,750
	Post Live Support	160	\$24,000
	Total Service Fees	5079	\$761,850
	Total License and Implementation Service Fees		\$954,350
Estimated Travel Related Expenses	Billed monthly as incurred.		\$180,000
	Total		\$1,134,350

Optional Items	Infinity.Link – Site License	1	\$40,000
	Infinity.Link - Configuration	150	\$22,500
	Total		\$62,500

License Payment Milestones

Reference	Milestone	Invoice Amount
LP1	25% on Contract Execution	\$48,125
LP2	75% on completion of installation of first data conversion of CIS Infinity by Consultant	\$144,375
	TOTAL	\$192,500

Service Payment Milestones

CITY will be billed monthly by Advanced for milestones completed during the month. Completion of milestone must be agreed upon by City prior to invoicing. The service fees milestones are as follows:

Reference	Milestone – CITY will be billed monthly for all milestones completed during the month (i.e. one invoice per month).	Invoice Amount
MP1	Project Management Month 1	\$ 13,500
MP2	Project Management Month 2	\$ 7,362
MP3	Project Management Month 3	\$ 7,362
MP4	Project Management Month 4	\$ 7,362
MP5	Project Management Month 5	\$ 7,362
MP6	Project Management Month 6	\$ 7,362
MP7	Project Management Month 7	\$ 7,362
MP8	Project Management Month 8	\$ 7,362
MP9	Project Management Month 9	\$ 7,362
MP10	Project Management Month 10	\$ 7,362
MP11	Project Management Month 11	\$ 7,362
MP12	Project Management Month 12	\$ 7,380
MP13	Installation of CIS Infinity Sign off	\$ 10,800
MP14	Delivery of Functional Discovery Workshops	\$ 45,000
MP15	Functional Discovery Document Signoff	\$ 22,500
MP16	Delivery of Data Conversion Workshop	\$ 13,500
MP17	Data Conversion Plan Sign off	\$ 9,000
MP18	Interface & Modification Workshop	\$ 13,500
MP19	Functional & Technical Specification Signoff - Modifications & Development Interfaces	\$ 22,500
MP20	Delivery of Reports Matrix	\$ 6,750
MP21	Initial Conversion Rollout	\$ 40,500
MP22	Initial Configuration Rollout	\$ 18,000
MP23	Completion of Core Team Training	\$ 27,000
MP24	Data Refresh # 2 Load (Functional Testing)	\$ 13,500
MP25	Functional Testing Sign off	\$ 36,000

MP26	Custom Reports Completion & Signoff	\$ 6,750
MP27	Data Refresh # 3 Load (ITC #1)	\$ 9,000
MP28	Integration Testing Cycle 1 Sign off	\$ 27,000
MP29	Deployment of Modifications	\$ 27,000
MP30	Deployment of Configuration Type Interfaces	\$ 22,500
MP31	Deployment of Development Type Interfaces	\$ 33,840
MP32	Data Refresh # 4 Load (ITC #2)	\$ 9,000
MP33	Integration Testing Cycle 2 Signoff	\$ 18,000
MP34	Data Refresh # 5 Load (UAT)	\$ 9,000
MP35	User Acceptance Testing Sign off	\$ 18,000
MP36	Completion of Week 2 End User Training	\$ 20,250
MP37	Completion of Week 4 End User Training	\$ 20,250
MP38	Completion of Week 6 End User Training	\$ 20,250
MP39	Completion of Week 9 End User Training	\$ 20,250
MP40	Go Live	\$ 9,000
MP41	Completion of Month 1 Post Live Support	\$ 21,600
MP42	Completion of Interface 2.1.2 - Munis Master Customer Database	\$ 8,775
MP43	Completion of Interface 2.1.5 - Munis Work Management System	\$ 12,150
MP44	Final System Acceptance	\$ 76,185
	Totals	\$ 761,850

Appendix A – Draft Project Schedule based on this Scope of Work



CIS Infinity Project
Plan Apr2114 - City o



CIS Infinity Project
Plan Apr2114 - City o

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
1	City of Columbia	65	5,159 hrs	261.41 days	Mon 4/6/15	Mon 4/25/16			
2	Project Pre-Planning	0	147 hrs	11.77 days	Mon 4/6/15	Tue 4/21/15			
3	Confirm Hardware Delivery	0	0 hrs	1 day	Mon 4/6/15	Mon 4/6/15			
4	Develop Draft Project Schedule	0	95 hrs	10 days	Tue 4/7/15	Mon 4/20/15	3	Project Manager,Applic	
5	Develop Draft Risk Plan	0	2 hrs	0.25 days	Tue 4/21/15	Tue 4/21/15	4	Project Manager	
6	Develop Draft Communication Plan	0	2 hrs	0.25 days	Tue 4/21/15	Tue 4/21/15	5	Project Manager	
7	Develop Draft Change Management Plan	0	2 hrs	0.25 days	Tue 4/21/15	Tue 4/21/15	6	Project Manager	
8	Develop Initial Resource Schedule	0	22 hrs	2.75 days	Thu 4/16/15	Mon 4/20/15	4FF	Project Manager	
9	Internal Project Team Kick-off	0	24 hrs	0.77 days	Tue 4/21/15	Tue 4/21/15	8	Application Consultant,	
10	Weekly City of Columbia Meeting	8	477 hrs	189.17 days	Mon 4/6/15	Thu 1/14/16			
11	Weekly Review of CustomerWise	8	227 hrs	189.17 days	Mon 4/6/15	Thu 1/14/16		PM[15%]	
12	Monthly Project Update	0	80 hrs	10 days	Wed 12/30/15	Thu 1/14/16	11FF	PM	
13	Monthly Resourcing	0	80 hrs	10 days	Wed 12/30/15	Thu 1/14/16	11FF	PM	
14	Project overview	0	90 hrs	11.25 days	Thu 12/24/15	Thu 1/14/16	11FF	PM	
15	Project Scheduling (On Site)	2	76 hrs	3.13 days	Mon 5/4/15	Thu 5/7/15	2FS+9 days		
16	Project Kick-off at City of Columbia	0	0 hrs	0 days	Mon 5/4/15	Mon 5/4/15			
17	Develop Project Schedule	2	50 hrs	3.13 days	Mon 5/4/15	Thu 5/7/15	16	Project Manager,Applic	
18	ADV - Deliver CIS Product Overview (remote)	0	4 hrs	0.5 days	Wed 5/6/15	Thu 5/7/15	16SS+2 day	Trainer	
19	Develop Draft Risk Plan	0	4 hrs	0.5 days	Thu 5/7/15	Thu 5/7/15	17FF	Project Manager	
20	Develop Draft Communication Plan	0	4 hrs	0.5 days	Thu 5/7/15	Thu 5/7/15	17FF	Project Manager	
21	Develop Draft Change Management Plan	0	4 hrs	0.5 days	Thu 5/7/15	Thu 5/7/15	17FF	Project Manager	
22	Develop Initial Resource Schedule	0	4 hrs	0.5 days	Thu 5/7/15	Thu 5/7/15	17FF	Project Manager	
23	ADV - Deliver Training Workbooks	0	1 hr	0.13 days	Thu 5/7/15	Thu 5/7/15	17FF	Project Manager	
24	ADV - Deliver Data Validation Workbook	0	1 hr	0.13 days	Thu 5/7/15	Thu 5/7/15	17FF	Project Manager	
25	ADV - Deliver and review Training Matrix	0	2 hrs	0.25 days	Thu 5/7/15	Thu 5/7/15	17FF	Project Manager	
26	Develop Draft Training Schedule	0	2 hrs	0.25 days	Thu 5/7/15	Thu 5/7/15	25FF	Project Manager	

Project: Pro Forma Project Plan Date: Mon 4/21/14	Task		External Milestone		Manual Summary Rollup	
	Split		Inactive Task		Manual Summary	
	Milestone		Inactive Milestone		Start-only	
	Summary		Inactive Summary		Finish-only	
	Project Summary		Manual Task		Deadline	
	External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
27	City of Columbia - Start documenting test cases for all testing	0	0 hrs	1 day	Wed 5/6/15	Thu 5/7/15	26FF		
28	Installation of CIS Infinity	0	32 hrs	8 days	Tue 5/5/15	Fri 5/15/15	2		
29	ADV - Install/Config Database Server	0	8 hrs	1 day	Tue 5/5/15	Wed 5/6/15	16SS+1 day	Installer DB	
30	ADV - Install/Config Application Server	0	8 hrs	1 day	Wed 5/6/15	Thu 5/7/15	29	Installer APP	
31	ADV - Install Desktop Application (1-2 machines)	0	8 hrs	1 day	Wed 5/6/15	Thu 5/7/15	30FF	Installer APP	
32	ADV - Train City of Columbia IT on Installation of Desktops	0	8 hrs	1 day	Thu 5/7/15	Fri 5/8/15	31	Installer APP	
33	City of Columbia - Sign-off on Installation	0	0 hrs	0 days	Fri 5/8/15	Fri 5/8/15	32		
34	City of Columbia - Complete Installation of Desktops	0	0 hrs	5 days	Fri 5/8/15	Fri 5/15/15	32		
35	Discovery	9	500 hrs	36.37 days	Fri 5/15/15	Tue 7/14/15	28		
36	ADV - Deliver Discovery Agenda	0	2 hrs	0.25 days	Fri 5/15/15	Tue 5/19/15	15FF	Application Consultant	
37	Discovery Workshop Week 1 (Onsite)	3	120 hrs	3 days	Tue 6/9/15	Fri 6/12/15	104FS+5 d		
38	Foundation Workshop	3	24 hrs	1 day	Tue 6/9/15	Wed 6/10/15		Application Consultant,	
39	Customer Service Workshop	0	24 hrs	1 day	Wed 6/10/15	Thu 6/11/15	38	Application Consultant,	
40	Move In - Move Out Workshop	0	24 hrs	1 day	Thu 6/11/15	Fri 6/12/15	39	Application Consultant,	
41	Legacy Cashiering and Inquiry Workshop	0	24 hrs	1 day	Thu 6/11/15	Fri 6/12/15	40FF	Application Consultant,	
42	General review	0	24 hrs	1 day	Thu 6/11/15	Fri 6/12/15	41FF	Application Consultant,	
43	Discovery Workshop Week 2 (Onsite)	3	120 hrs	4 days	Mon 6/15/15	Fri 6/19/15	37FS+1 day		
44	Billing Process Workshop	3	24 hrs	1 day	Mon 6/15/15	Tue 6/16/15		Application Consultant,	
45	Rates Workshop	0	24 hrs	1 day	Tue 6/16/15	Wed 6/17/15	44	Application Consultant,	
46	Financial Mgmt Workshop	0	24 hrs	1 day	Wed 6/17/15	Thu 6/18/15	45	Application Consultant,	
47	Meters and Assets Workshop	0	24 hrs	1 day	Thu 6/18/15	Fri 6/19/15	46	Application Consultant,	
48	General review	0	24 hrs	1 day	Thu 6/18/15	Fri 6/19/15	47FF	Application Consultant,	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

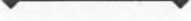
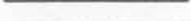
ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
49	Discovery Workshop Week 3 (Onsite)	3	120 hrs	4 days	Mon 6/29/15	Wed 7/8/15	43FS+6 day		
50	Service Orders Workshop	3	24 hrs	1 day	Mon 6/29/15	Tue 6/30/15		Application Consultant,	
51	Collections Workshop	0	24 hrs	1 day	Tue 6/30/15	Thu 7/2/15	50	Application Consultant,	
52	Reports, Notices and Letters Workshop	0	24 hrs	1 day	Tue 6/30/15	Thu 7/2/15	51FF	Application Consultant,	
53	General review	0	48 hrs	2 days	Thu 7/2/15	Wed 7/8/15	52	Application Consultant,	
54	Discovery Workshop finalization	0	138 hrs	36.37 days	Fri 5/15/15	Tue 7/14/15			
55	ADV - Update Discovery Document	0	86 hrs	6.45 days	Fri 5/15/15	Thu 5/28/15		Application Consultant,	
56	ADV - Delivery Discovery Document	0	36 hrs	4.5 days	Thu 5/28/15	Wed 6/3/15	55	Project Manager	
57	City of Columbia - Review Discovery Document	0	0 hrs	5 days	Wed 6/3/15	Wed 6/10/15	56		
58	City of Columbia - Provide Comments	0	0 hrs	3.75 days	Wed 6/10/15	Tue 6/16/15	57		
59	ADV - Update Discovery Document	0	16 hrs	6.67 days	Tue 6/16/15	Thu 6/25/15	58	Application Consultant	
60	City of Columbia - Sign-Off on Discovery Document	0	0 hrs	10 days	Thu 6/25/15	Tue 7/14/15	59		
61	Conversion (Data Discovery and Mapping Exercise)	1	128 hrs	57.38 days	Thu 5/7/15	Wed 8/5/15			
62	City of Columbia - Deliver initial Extract	0	0 hrs	5 days	Thu 5/7/15	Thu 5/14/15	17		
63	City of Columbia - Deliver Data Dictionary	0	0 hrs	5 days	Thu 5/7/15	Thu 5/14/15	62FF		
64	ADV - Legacy Data Assessment	0	8 hrs	5 days	Thu 5/14/15	Fri 5/22/15	63	Conversion[20%]	
65	ADV - Setup Conversion Environment	0	8 hrs	10 days	Fri 5/22/15	Mon 6/8/15	64	Conversion[10%]	
66	ADV - Develop MS Access DB for Data Mapping Exercise	0	4 hrs	1.67 days	Mon 6/8/15	Wed 6/10/15	65	Conversion[30%]	
67	ADV - Data Mapping Exercise (Onsite) week 1	1	40 hrs	5 days	Wed 7/8/15	Wed 7/15/15	49	Conversion	
68	ADV - Data Mapping Exercise (remote) week 2	0	40 hrs	5 days	Wed 7/15/15	Wed 7/22/15	67	Conversion	
69	ADV - Data Mapping Exercise (remote)	0	16 hrs	2 days	Wed 7/22/15	Fri 7/24/15	68	Conversion	
70	ADV - Legacy Data Clean-up List (if applicable)	0	4 hrs	0.5 days	Fri 7/24/15	Mon 7/27/15	69	Conversion	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
71	ADV - Develop Potential List of Baseline Accounts	0	4 hrs	0.5 days	Mon 7/27/15	Mon 7/27/15	70	Conversion	
72	ADV - Update Data Mapping DB	0	4 hrs	0.5 days	Mon 7/27/15	Tue 7/28/15	71	Conversion	
73	ADV - Deliver Data Mapping DB	0	0 hrs	0 days	Tue 7/28/15	Tue 7/28/15	72		
74	City of Columbia - Signoff on Data Mapping DB	0	0 hrs	5 days	Tue 7/28/15	Wed 8/5/15	73		
75	Initial Configuration	0	288 hrs	90.03 days	Tue 4/21/15	Wed 9/2/15			
76	ADV - Initial System Clean-up	0	24 hrs	1.5 days	Tue 4/21/15	Thu 4/23/15	9	Tech Lead,Application	
77	ADV - Review SOW	0	24 hrs	2.5 days	Thu 4/23/15	Mon 4/27/15	76	Tech Lead,Application	
78	ADV - Review Discovery Document	0	170 hrs	7.08 days	Thu 7/9/15	Mon 7/20/15	49FS+1 day	Application Consultant,	
79	ADV - Review Discovery Document Final	0	36 hrs	6.67 days	Tue 6/30/15	Tue 7/14/15	54FF	Tech Lead[60%],Applica	
80	ADV - Q/A Analysis of the In-house System	0	30 hrs	3.13 days	Wed 8/26/15	Mon 8/31/15	164	Tech Lead[60%],Applica	
81	ADV - Rollout Configuration Onsite	0	4 hrs	2.5 days	Mon 8/31/15	Wed 9/2/15	80	Tech Lead[20%]	
82	Modifications	3	165 hrs	129.36 days	Wed 7/22/15	Tue 2/2/16			
83	ADV - Initial Discussions (Onsite)	3	32 hrs	1.33 days	Wed 7/22/15	Fri 7/24/15	67FS+5 day	Development,Tech Lea	
84	ADV - Development of Specifications	0	28 hrs	3.28 days	Fri 7/24/15	Wed 7/29/15	83	Development,Tech Lea	
85	ADV - Deliver Specifications	0	1 hr	0.13 days	Wed 7/29/15	Wed 7/29/15	84	Project Manager	
86	City of Columbia - Review Specifications	0	0 hrs	12.5 days	Wed 7/29/15	Tue 8/18/15	85		
87	ADV - Update Specifications	0	4 hrs	2.27 days	Tue 8/18/15	Thu 8/20/15	86	Development[20%],Tec	
88	City of Columbia - Signoff on Specifications	0	0 hrs	2.5 days	Thu 8/20/15	Mon 8/24/15	87		
89	ADV - Develop Modifications	0	100 hrs	6.25 days	Tue 10/27/15	Thu 11/5/15	88,183FF	Development[200%]	
90	City of Columbia - Test Modifications	0	0 hrs	80 days	Fri 10/2/15	Tue 2/2/16	261FF		
91	City of Columbia - Signoff on Modifications	0	0 hrs	0 days	Tue 2/2/16	Tue 2/2/16	90		
92	Interfaces	0	934 hrs	181 days	Mon 4/6/15	Thu 12/31/15			
93	ADV - Review of SOW	0	24 hrs	30 days	Mon 4/6/15	Fri 5/15/15		Tech Lead[10%]	
94	ADV - Request necessary files/layout from City of Columbia	0	1 hr	1.25 days	Tue 5/19/15	Wed 5/20/15	93	Tech Lead[10%]	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

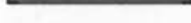
ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
95	City of Columbia - Deliver the Requested files/layouts to ADV	0	0 hrs	12.5 days	Wed 5/20/15	Mon 6/8/15	94		
96	ADV - Interface Discovery	0	80 hrs	5 days	Mon 6/8/15	Mon 6/15/15	95	Development, Tech Lea	
97	ADV - Configure Interfaces	0	740 hrs	92.5 days	Mon 6/15/15	Fri 10/30/15	96	Tech Lead	
98	City of Columbia - Test Interfaces	0	0 hrs	20 days	Fri 10/30/15	Wed 12/2/15	97		
99	ADV - Make adjustments to Interfaces	0	89 hrs	6.25 days	Wed 12/2/15	Thu 12/10/15	98		
100	City of Columbia - Re-Test Interfaces	0	0 hrs	12.5 days	Thu 12/10/15	Wed 12/30/15	99		
101	City of Columbia - Signoff on Interfaces	0	0 hrs	1 day	Thu 12/31/15	Thu 12/31/15	100		
102	Core Team Training	5	200 hrs	62.33 days	Tue 5/26/15	Thu 8/27/15			
103	Week 1	1	40 hrs	5 days	Tue 5/26/15	Tue 6/2/15	33FS+10 d		
104	ADV - Orientation & Overview and Daily Process	1	40 hrs	5 days	Tue 5/26/15	Tue 6/2/15		Trainer	
105	Week 2	1	40 hrs	3.75 days	Mon 7/27/15	Thu 7/30/15	83FS+1 day		
106	ADV - Billing	1	30 hrs	3.75 days	Mon 7/27/15	Thu 7/30/15		Trainer	
107	ADV - Cash	0	10 hrs	1.25 days	Wed 7/29/15	Thu 7/30/15	106FF	Trainer	
108	Week 3	1	40 hrs	3.13 days	Tue 8/4/15	Fri 8/7/15	105FS+2 d		
109	ADV - Collections	1	20 hrs	2.5 days	Tue 8/4/15	Fri 8/7/15		Trainer	
110	ADV - Designing SO	0	5 hrs	0.63 days	Fri 8/7/15	Fri 8/7/15	109	Trainer	
111	ADV - Generating Service Orders	0	5 hrs	0.63 days	Fri 8/7/15	Fri 8/7/15	110FF	Trainer	
112	ADV - Reports	0	10 hrs	1.25 days	Thu 8/6/15	Fri 8/7/15	111FF	Trainer	
113	Week 4	1	40 hrs	2.63 days	Mon 8/17/15	Thu 8/20/15	108FS+6 d		
114	ADV - GL and Month/Year End	1	5 hrs	0.63 days	Mon 8/17/15	Tue 8/18/15		Trainer	
115	ADV - Security	0	5 hrs	0.63 days	Mon 8/17/15	Tue 8/18/15	114FF	Trainer	
116	ADV - Scheduler	0	5 hrs	0.63 days	Mon 8/17/15	Tue 8/18/15	115FF	Trainer	
117	ADV - System Administration	0	15 hrs	1 day	Tue 8/18/15	Wed 8/19/15	116	Trainer	
118	ADV - Rate Management	0	10 hrs	1 day	Wed 8/19/15	Thu 8/20/15	117	Trainer	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
119	Week 5	1	40 hrs	2.5 days	Mon 8/24/15	Thu 8/27/15	113FS+2 d		
120	ADV - Water Inventory	1	10 hrs	1.25 days	Mon 8/24/15	Tue 8/25/15		Trainer	
121	ADV - Electric Inventory	0	10 hrs	1.25 days	Tue 8/25/15	Thu 8/27/15	120	Trainer	
122	ADV - Instrument & Distribution Transformers	0	10 hrs	1.25 days	Tue 8/25/15	Thu 8/27/15	121FF	Trainer	
123	ADV - Back Flow	0	10 hrs	1.25 days	Tue 8/25/15	Thu 8/27/15	122FF	Trainer	
124	Reports, Notices, Receipts and Bill Print	2	250 hrs	152.64 days	Mon 4/6/15	Tue 11/17/15			
125	Reporting	2	120 hrs	41.52 days	Thu 8/27/15	Tue 10/27/15			
126	ADV - Review of current reporting obligations (Onsite)	2	32 hrs	4 days	Thu 8/27/15	Wed 9/2/15	52,119	Crystal Reports	
127	ADV - Analyze City of Columbia Reports	0	12 hrs	1.5 days	Wed 9/2/15	Thu 9/3/15	126	Crystal Reports	
128	ADV - Provide Mock-up of Custom Reports	0	16 hrs	2 days	Thu 9/3/15	Tue 9/8/15	127	Crystal Reports	
129	City of Columbia - Signoff on Mock-ups	0	0 hrs	6.25 days	Tue 9/8/15	Wed 9/16/15	128		
130	ADV - Program Custom Reports	0	52 hrs	8.02 days	Wed 9/16/15	Mon 9/28/15	129	Crystal Reports[81%]	
131	City of Columbia - Test Custom Reports	0	0 hrs	12.5 days	Mon 9/28/15	Fri 10/16/15	130		
132	ADV - Make any adjustments	0	8 hrs	1 day	Fri 10/16/15	Mon 10/19/15	131	Crystal Reports	
133	City of Columbia - Re-test Custom Reports	0	0 hrs	6.25 days	Mon 10/19/15	Tue 10/27/15	132		
134	City of Columbia - Signoff on Custom Reports	0	0 hrs	0 days	Tue 10/27/15	Tue 10/27/15	133		
135	Bill Print Design	0	100 hrs	128.75 days	Thu 5/7/15	Tue 11/17/15			
136	ADV - Provide Sample Bills	0	1 hr	1.25 days	Thu 5/7/15	Mon 5/11/15	15	Project Manager[10%]	
137	City of Columbia - Provide Bill Print Mock-Up	0	0 hrs	90 days	Mon 5/11/15	Wed 9/23/15	136		
138	ADV - Review Bill Print Mock-up	0	20 hrs	2.5 days	Wed 9/23/15	Fri 9/25/15	137	Crystal Reports	
139	ADV - Code and test Bill Print	0	60 hrs	15 days	Fri 9/25/15	Mon 10/19/15	138	Crystal Reports[50%]	
140	ADV - Rollout Bill Print	0	1 hr	1.25 days	Mon 10/19/15	Tue 10/20/15	139	Crystal Reports[10%]	
141	City of Columbia - Test Bill Print (1500+ Bills)	0	0 hrs	18.75 days	Tue 10/20/15	Tue 11/17/15	140,236SS		
142	ADV - Make any necessary code changes	0	18 hrs	67.5 days	Tue 8/11/15	Tue 11/17/15	141FF	Crystal Reports[3%]	
143	City of Columbia - Signoff on Bill Print	0	0 hrs	0 days	Tue 11/17/15	Tue 11/17/15	142		

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
144	Notices	0	15 hrs	27.5 days	Mon 4/6/15	Wed 5/13/15			
145	City of Columbia - Design New Notices	0	0 hrs	12.5 days	Mon 4/6/15	Wed 4/22/15			
146	City of Columbia - Deliver Notices Design to ADV	0	0 hrs	0 days	Wed 4/22/15	Wed 4/22/15	145		
147	ADV - Program Notices	0	10 hrs	7.5 days	Wed 4/22/15	Fri 5/1/15	146	Crystal Reports[17%]	
148	ADV - Rollout Notices Onsite	0	1 hr	1.25 days	Mon 5/4/15	Tue 5/5/15	147	Crystal Reports[10%]	
149	City of Columbia - Test Notices	0	0 hrs	6.25 days	Tue 5/5/15	Wed 5/13/15	148		
150	ADV - Make any necessary code changes	0	4 hrs	12.5 days	Mon 4/27/15	Wed 5/13/15	149FF	Crystal Reports[4%]	
151	City of Columbia - Signoff on Notices	0	0 hrs	0 days	Wed 5/13/15	Wed 5/13/15	150		
152	Receipts	0	15 hrs	6.25 days	Mon 4/6/15	Tue 4/14/15			
153	City of Columbia - Design New Receipts	0	0 hrs	1.25 days	Mon 4/6/15	Tue 4/7/15			
154	City of Columbia - Deliver Receipt Design to ADV	0	0 hrs	0 days	Tue 4/7/15	Tue 4/7/15	153		
155	ADV - Program Receipt	0	10 hrs	2.5 days	Tue 4/7/15	Thu 4/9/15	154	Crystal Reports[50%]	
156	ADV - Rollout Receipt Onsite	0	1 hr	1.25 days	Thu 4/9/15	Fri 4/10/15	155	Crystal Reports[10%]	
157	City of Columbia - Test Receipt	0	0 hrs	1.25 days	Mon 4/13/15	Tue 4/14/15	156		
158	ADV - Make any necessary code changes	0	4 hrs	5 days	Tue 4/7/15	Tue 4/14/15	157FF	Crystal Reports[10%]	
159	City of Columbia - Signoff on Receipt	0	0 hrs	0 days	Tue 4/14/15	Tue 4/14/15	158		
160	Data Refreshes	1	472 hrs	179.91 days	Fri 7/24/15	Thu 4/14/16			
161	Data Refresh # 1 (Conversion)	0	122 hrs	28.21 days	Fri 7/24/15	Thu 9/3/15			
162	ADV - Programming of the Conversion	0	88 hrs	16.5 days	Fri 7/24/15	Wed 8/19/15	69	Conversion[67%]	
163	ADV - Run Initial Conversion	0	12 hrs	2.4 days	Wed 8/19/15	Fri 8/21/15	162	Conversion[63%]	
164	ADV - Load Converted Data to In-house Systems	0	4 hrs	2.5 days	Fri 8/21/15	Wed 8/26/15	163	Conversion[20%]	
165	ADV - Run Data Integrity Report	0	4 hrs	1.67 days	Wed 8/26/15	Thu 8/27/15	164	Conversion[30%]	
166	ADV - Q/A Analysis of Converted Data	0	10 hrs	1.39 days	Thu 8/27/15	Mon 8/31/15	165,119	Conversion[10%],Tech	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
167	ADV - Upload Data to FTP site	0	1 hr	1.25 days	Mon 8/31/15	Tue 9/1/15	166	Conversion[10%]	
168	ADV - Load Converted Data to Onsite Production System	0	2 hrs	2.5 days	Tue 9/1/15	Thu 9/3/15	167	Conversion[10%]	
169	ADV - Load Converted Data to Onsite Test System	0	1 hr	1.25 days	Wed 9/2/15	Thu 9/3/15	168FF	Conversion[10%]	
170	Data Refresh #2 (Functional Testing)	0	50 hrs	6.34 days	Wed 9/23/15	Thu 10/1/15	236		
171	City of Columbia - Deliver Data Extract	0	0 hrs	1 day	Wed 9/23/15	Thu 9/24/15			
172	City of Columbia - Deliver Data Validation Numbers	0	0 hrs	1 day	Wed 9/23/15	Thu 9/24/15	171FF		
173	ADV - Run Initial Conversion	0	12 hrs	1.8 days	Thu 9/24/15	Mon 9/28/15	172	Conversion[83%]	
174	ADV - Load Converted Data to In-house Systems	0	1 hr	0.63 days	Mon 9/28/15	Mon 9/28/15	173	Conversion[20%]	
175	ADV - Run Data Integrity Report	0	1 hr	0.63 days	Mon 9/28/15	Mon 9/28/15	174FF	Conversion[20%]	
176	ADV - Q/A Analysis of Converted Data	0	12 hrs	1.67 days	Mon 9/28/15	Wed 9/30/15	175	Conversion[10%],Tech	
177	ADV - Upload Data to FTP site	0	4 hrs	0.63 days	Tue 9/29/15	Wed 9/30/15	176FF	Conversion[80%]	
178	ADV - Load Converted Data to Onsite Production System	0	4 hrs	0.63 days	Wed 9/30/15	Thu 10/1/15	177	Conversion[80%]	
179	ADV - Load Converted Data to Onsite Test System	0	4 hrs	0.63 days	Wed 9/30/15	Thu 10/1/15	178FF	Conversion[80%]	
180	ADV - Provide Data Validation Worksheet	0	4 hrs	0.63 days	Wed 9/30/15	Thu 10/1/15	178FF	Conversion[80%]	
181	ADV - Reconcile any differences	0	4 hrs	0.63 days	Thu 10/1/15	Thu 10/1/15	180	Conversion[80%]	
182	ADV - Make any necessary code changes	0	4 hrs	0.5 days	Thu 10/1/15	Thu 10/1/15	181FF	Conversion	
183	Data Refresh #3 (Integration Testing Cycle 1)	0	75 hrs	10.72 days	Wed 10/21/15	Thu 11/5/15	243		
184	City of Columbia - Deliver Data Extract	0	0 hrs	1 day	Wed 10/21/15	Thu 10/22/15			
185	City of Columbia - Deliver Data Validation Numbers	0	0 hrs	1 day	Wed 10/21/15	Thu 10/22/15	184FF		

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

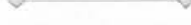
ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
186	ADV - Run Initial Conversion	0	37 hrs	5.55 days	Thu 10/22/15	Thu 10/29/15	185	Conversion[83%]	
187	ADV - Load Converted Data to In-house Systems	0	1 hr	0.63 days	Thu 10/29/15	Fri 10/30/15	186	Conversion[20%]	
188	ADV - Run Data Integrity Report	0	1 hr	0.63 days	Thu 10/29/15	Fri 10/30/15	187FF	Conversion[20%]	
189	ADV - Q/A Analysis of Converted Data	0	12 hrs	1.67 days	Fri 10/30/15	Tue 11/3/15	188	Conversion[10%],Tech	
190	ADV - Upload Data to FTP site	0	4 hrs	0.63 days	Tue 11/3/15	Tue 11/3/15	189	Conversion[80%]	
191	ADV - Load Converted Data to Onsite Production System	0	4 hrs	0.63 days	Tue 11/3/15	Wed 11/4/15	190	Conversion[80%]	
192	ADV - Load Converted Data to Onsite Test System	0	4 hrs	0.63 days	Tue 11/3/15	Wed 11/4/15	191FF	Conversion[80%]	
193	ADV - Provide Data Validation Worksheet	0	4 hrs	0.63 days	Tue 11/3/15	Wed 11/4/15	191FF	Conversion[80%]	
194	ADV - Reconcile any differences	0	4 hrs	0.63 days	Wed 11/4/15	Thu 11/5/15	193	Conversion[80%]	
195	ADV - Make any necessary code changes	0	4 hrs	0.5 days	Wed 11/4/15	Thu 11/5/15	194FF	Conversion	
196	Data Refresh #4 (Integration Testing Cycle 2)	0	75 hrs	10.09 days	Tue 12/22/15	Fri 1/8/16	251		
197	City of Columbia - Deliver Data Extract	0	0 hrs	1 day	Tue 12/22/15	Wed 12/23/15			
198	City of Columbia - Deliver Data Validation Numbers	0	0 hrs	1 day	Tue 12/22/15	Wed 12/23/15	197FF		
199	ADV - Run Initial Conversion	0	37 hrs	5.55 days	Wed 12/23/15	Mon 1/4/16	198	Conversion[83%]	
200	ADV - Load Converted Data to In-house Systems	0	1 hr	0.63 days	Mon 1/4/16	Tue 1/5/16	199	Conversion[20%]	
201	ADV - Run Data Integrity Report	0	1 hr	0.63 days	Mon 1/4/16	Tue 1/5/16	200FF	Conversion[20%]	
202	ADV - Q/A Analysis of Converted Data	0	12 hrs	1.67 days	Tue 1/5/16	Wed 1/6/16	201	Conversion[10%],Tech	
203	ADV - Upload Data to FTP site	0	4 hrs	0.63 days	Wed 1/6/16	Wed 1/6/16	202FF	Conversion[80%]	
204	ADV - Load Converted Data to Onsite Production System	0	4 hrs	0.63 days	Wed 1/6/16	Thu 1/7/16	203	Conversion[80%]	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
205	ADV - Load Converted Data to Onsite Test System	0	4 hrs	0.63 days	Wed 1/6/16	Thu 1/7/16	204FF	Conversion[80%]	
206	ADV - Provide Data Validation Worksheet	0	4 hrs	0.63 days	Wed 1/6/16	Thu 1/7/16	204FF	Conversion[80%]	
207	ADV - Reconcile any differences	0	4 hrs	0.63 days	Thu 1/7/16	Fri 1/8/16	206	Conversion[80%]	
208	ADV - Make any necessary code changes	0	4 hrs	0.5 days	Thu 1/7/16	Fri 1/8/16	207FF	Conversion	
209	Data Refresh #5 (UAT)	0	75 hrs	10.09 days	Tue 2/2/16	Tue 2/16/16	261		
210	City of Columbia - Deliver Data Extract	0	0 hrs	1 day	Tue 2/2/16	Wed 2/3/16			
211	City of Columbia - Deliver Data Validation Numbers	0	0 hrs	1 day	Tue 2/2/16	Wed 2/3/16	210FF		
212	ADV - Run Initial Conversion	0	37 hrs	5.55 days	Wed 2/3/16	Wed 2/10/16	211	Conversion[83%]	
213	ADV - Load Converted Data to In-house Systems	0	1 hr	0.63 days	Wed 2/10/16	Thu 2/11/16	212	Conversion[20%]	
214	ADV - Run Data Integrity Report	0	1 hr	0.63 days	Wed 2/10/16	Thu 2/11/16	213FF	Conversion[20%]	
215	ADV - Q/A Analysis of Converted Data	0	12 hrs	1.67 days	Thu 2/11/16	Fri 2/12/16	214	Conversion[10%], Tech	
216	ADV - Upload Data to FTP site	0	4 hrs	0.63 days	Fri 2/12/16	Fri 2/12/16	215FF	Conversion[80%]	
217	ADV - Load Converted Data to Onsite Production System	0	4 hrs	0.63 days	Fri 2/12/16	Mon 2/15/16	216	Conversion[80%]	
218	ADV - Load Converted Data to Onsite Test System	0	4 hrs	0.63 days	Fri 2/12/16	Mon 2/15/16	217FF	Conversion[80%]	
219	ADV - Provide Data Validation Worksheet	0	4 hrs	0.63 days	Fri 2/12/16	Mon 2/15/16	217FF	Conversion[80%]	
220	ADV - Reconcile any differences	0	4 hrs	0.63 days	Mon 2/15/16	Tue 2/16/16	219	Conversion[80%]	
221	ADV - Make any necessary code changes	0	4 hrs	0.5 days	Mon 2/15/16	Tue 2/16/16	220FF	Conversion	
222	Data Refresh #6 (Go Live)	1	75 hrs	9.47 days	Fri 4/1/16	Thu 4/14/16	295FS+5 d		
223	City of Columbia - Deliver Data Extract	0	0 hrs	1 day	Fri 4/1/16	Mon 4/4/16			
224	City of Columbia - Deliver Data Validation Numbers	0	0 hrs	1 day	Fri 4/1/16	Mon 4/4/16	223FF		

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
225	ADV - Run Initial Conversion	1	37 hrs	5.55 days	Mon 4/4/16	Mon 4/11/16	224	Conversion[83%]	
226	ADV - Load Converted Data to In-house Systems	0	1 hr	0.63 days	Mon 4/11/16	Tue 4/12/16	225	Conversion[20%]	
227	ADV - Run Data Integrity Report	0	1 hr	0.63 days	Mon 4/11/16	Tue 4/12/16	226FF	Conversion[20%]	
228	ADV - Q/A Analysis of Converted Data	0	12 hrs	1.67 days	Tue 4/12/16	Thu 4/14/16	227	Conversion[10%],Tech	
229	ADV - Upload Data to FTP site	0	4 hrs	0.63 days	Wed 4/13/16	Thu 4/14/16	228FF	Conversion[80%]	
230	ADV - Load Converted Data to Onsite Production System	0	4 hrs	0.63 days	Thu 4/14/16	Thu 4/14/16	229	Conversion[80%]	
231	ADV - Load Converted Data to Onsite Test System	0	4 hrs	0.63 days	Thu 4/14/16	Thu 4/14/16	230FF	Conversion[80%]	
232	ADV - Provide Data Validation Worksheet	0	4 hrs	0.63 days	Thu 4/14/16	Thu 4/14/16	230FF	Conversion[80%]	
233	ADV - Reconcile any differences	0	4 hrs	0.63 days	Thu 4/14/16	Thu 4/14/16	232FF	Conversion[80%]	
234	ADV - Make any necessary code changes	0	4 hrs	0.5 days	Thu 4/14/16	Thu 4/14/16	233FF	Conversion	
235	Testing Phases	13	526 hrs	127.24 days	Thu 9/3/15	Fri 3/11/16	75,161		
236	Conversion Testing	3	80 hrs	12.5 days	Thu 9/3/15	Wed 9/23/15			
237	ADV - Provide Testing Worksheets	0	2 hrs	2.5 days	Thu 9/3/15	Wed 9/9/15		Project Manager[10%]	
238	ADV - Walk Through Testing worksheets	3	60 hrs	2.5 days	Thu 9/3/15	Wed 9/9/15		Conversion,Project Ma	
239	City of Columbia - Conduct Testing	0	0 hrs	10 days	Wed 9/9/15	Wed 9/23/15	237		
240	City of Columbia - Report any issues into CustomerWise	0	0 hrs	10 days	Wed 9/9/15	Wed 9/23/15	239FF		
241	ADV - Make any necessary Conversion changes	0	18 hrs	2.25 days	Wed 9/9/15	Fri 9/11/15	239SS	Conversion	
242	City of Columbia - Re-test CustomerWise Items	0	0 hrs	8 days	Thu 9/3/15	Wed 9/16/15	241FF		
243	Functional Testing	2	102 hrs	12.5 days	Thu 10/1/15	Wed 10/21/15	182		
244	ADV - Provide Testing Worksheets	0	2 hrs	2.5 days	Thu 10/1/15	Tue 10/6/15		Project Manager[10%]	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
245	ADV - OTJL	2	60 hrs	3.75 days	Tue 10/6/15	Tue 10/13/15	244	Project Manager,Tech I	
246	City of Columbia - Conduct Testing	0	0 hrs	10 days	Tue 10/6/15	Wed 10/21/15	244		
247	City of Columbia - Report any issues into CustomerWise	0	0 hrs	10 days	Tue 10/6/15	Wed 10/21/15	246FF		
248	ADV - Make any necessary configuration changes	0	20 hrs	3.33 days	Thu 10/15/15	Wed 10/21/15	246FF	Tech Lead[75%]	
249	ADV - OTJL	0	20 hrs	1.25 days	Tue 10/6/15	Wed 10/7/15	247SS	Project Manager,Tech I	
250	City of Columbia - Re-test CustomerWise Items	0	0 hrs	5 days	Wed 10/14/15	Wed 10/21/15	248FF		
251	Integration Testing Cycle 1	2	130 hrs	30 days	Thu 11/5/15	Tue 12/22/15	195		
252	Develop Stress Test Plan	0	5 hrs	0.31 days	Thu 11/5/15	Thu 11/5/15		Project Manager,Tech I	
253	Develop Integration Test Plan	0	5 hrs	1.25 days	Thu 11/5/15	Fri 11/6/15		Project Manager[50%]	
254	City of Columbia - Develop Integration Test Scripts	0	0 hrs	5 days	Thu 11/5/15	Fri 11/13/15			
255	ADV - OTJL	2	70 hrs	4.38 days	Fri 11/13/15	Thu 11/19/15	254	Project Manager,Tech I	
256	City of Columbia - Conduct Testing	0	0 hrs	25 days	Fri 11/13/15	Tue 12/22/15	254,89		
257	City of Columbia - Report any issues into CustomerWise	0	0 hrs	25 days	Fri 11/13/15	Tue 12/22/15	256FF		
258	ADV - Make any necessary configuration changes	0	30 hrs	3.75 days	Fri 11/13/15	Wed 11/18/15	257SS	Tech Lead	
259	ADV - OTJL	0	20 hrs	1.25 days	Fri 11/13/15	Mon 11/16/15	256SS	Tech Lead,Project Man	
260	City of Columbia - Re-test CustomerWise Items	0	0 hrs	7 days	Fri 11/6/15	Wed 11/18/15	258FF		
261	Integration Testing Cycle 2	2	114 hrs	17 days	Fri 1/8/16	Tue 2/2/16	208		
262	City of Columbia - Develop Integration Test Scripts	0	0 hrs	2 days	Fri 1/8/16	Tue 1/12/16			

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
263	ADV - OTJL	2	60 hrs	3.75 days	Fri 1/8/16	Wed 1/13/16		Tech Lead,Project Man	
264	City of Columbia - Conduct Testing	0	0 hrs	15 days	Tue 1/12/16	Tue 2/2/16	262		
265	City of Columbia - Report any issues into CustomerWise	0	0 hrs	15 days	Tue 1/12/16	Tue 2/2/16	264FF		
266	ADV - Make any necessary configuration changes	0	24 hrs	3 days	Tue 1/12/16	Fri 1/15/16	265SS	Tech Lead	
267	ADV - OTJL	0	30 hrs	1.88 days	Tue 1/12/16	Wed 1/13/16	264SS	Tech Lead,Project Man	
268	City of Columbia - Re-test CustomerWise Items	0	0 hrs	6.25 days	Fri 1/8/16	Mon 1/18/16	266FF		
269	User Acceptance Testing	4	100 hrs	18 days	Tue 2/16/16	Fri 3/11/16	221		
270	City of Columbia - Develop Integration Test Scripts	0	0 hrs	3 days	Tue 2/16/16	Fri 2/19/16			
271	City of Columbia - Conduct Testing	0	0 hrs	15 days	Fri 2/19/16	Fri 3/11/16	270		
272	ADV - OTJL	3	80 hrs	6 days	Fri 2/19/16	Mon 2/29/16	271SS	Tech Lead,Trainer,Proje	
273	City of Columbia - Report any issues into CustomerWise	0	0 hrs	15 days	Fri 2/19/16	Fri 3/11/16	271FF		
274	ADV - Make any necessary configuration changes	1	20 hrs	2.5 days	Tue 3/8/16	Fri 3/11/16	271FF	Tech Lead	
275	City of Columbia - Re-test CustomerWise Items	0	0 hrs	15 days	Fri 2/19/16	Fri 3/11/16	274FF		
276	End User Training	9	360 hrs	51 days	Thu 10/1/15	Thu 12/17/15			
277	City of Columbia - Finalize End User Training Plan	0	0 hrs	5 days	Thu 10/1/15	Thu 10/8/15	243SS		
278	ADV - End User Week 1	1	40 hrs	5 days	Thu 10/8/15	Fri 10/16/15	277	Trainer	
279	ADV - End User Week 2	1	40 hrs	5 days	Fri 10/16/15	Fri 10/23/15	278	Trainer	
280	ADV - End User Week 3	1	40 hrs	5 days	Fri 10/23/15	Fri 10/30/15	279	Trainer	

Project: Pro Forma Project Plan
Date: Mon 4/21/14

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

ID	Task Name	Trips	Work	Duration	Start	Finish	Predecessor	Resource Names	A
281	ADV - End User Week 4	1	40 hrs	6 days	Fri 10/30/15	Mon 11/9/15	280	Trainer	
282	ADV - End User Week 5	1	40 hrs	5 days	Mon 11/9/15	Tue 11/17/15	281	Trainer	
283	ADV - End User Week 6	1	40 hrs	5 days	Tue 11/17/15	Tue 11/24/15	282	Trainer	
284	ADV - End User Week 7	1	40 hrs	5 days	Tue 11/24/15	Thu 12/3/15	283	Trainer	
285	ADV - End User Week 8	1	40 hrs	5 days	Thu 12/3/15	Thu 12/10/15	284	Trainer	
286	ADV - End User Week 9	1	40 hrs	5 days	Thu 12/10/15	Thu 12/17/15	285	Trainer	
287	On the Job Learning Training	6	240 hrs	30 days	Thu 11/5/15	Tue 12/22/15	251SS		
288	OTJL Training	6	240 hrs	30 days	Thu 11/5/15	Tue 12/22/15		Trainer	
289	Go Live	4	204 hrs	19.88 days	Fri 3/11/16	Fri 4/8/16	235		
290	ADV - Finalize Go/No Go Criteria	0	8 hrs	10 days	Fri 3/11/16	Fri 3/25/16		Project Manager[10%]	
291	ADV - Finalize Organization Readiness Checklist	0	8 hrs	10 days	Fri 3/11/16	Fri 3/25/16	290FF	Project Manager[10%]	
292	ADV - Finalize Post Go Live Plan	0	8 hrs	10 days	Fri 3/11/16	Fri 3/25/16	290FF	Project Manager[10%]	
293	ADV - Finalize Transition Plan to Support	0	8 hrs	10 days	Fri 3/11/16	Fri 3/25/16	290FF	Project Manager[10%]	
294	ADV - Finalize Cutover Plan	0	8 hrs	10 days	Fri 3/11/16	Fri 3/25/16	290FF	Project Manager[10%]	
295	City of Columbia - Go / No Go Decision	0	0 hrs	10 days	Fri 3/11/16	Fri 3/25/16	290FF		
296	ADV - Finalize Go Live Plan	0	8 hrs	10 days	Fri 3/11/16	Fri 3/25/16	290FF	Project Manager[10%]	
297	Go Live	4	156 hrs	4.88 days	Fri 4/1/16	Fri 4/8/16	222SS	Application Consultant,	
298	Post Live Support	2	160 hrs	11.33 days	Fri 4/8/16	Mon 4/25/16	297		
299	Week 1	1	40 hrs	2.5 days	Fri 4/8/16	Tue 4/12/16		Tech Lead,Project Man	
300	Week 2	1	40 hrs	2.5 days	Tue 4/12/16	Fri 4/15/16	299	Tech Lead,Project Man	
301	Week 3	0	40 hrs	3.2 days	Fri 4/15/16	Wed 4/20/16	300	Tech Lead,Project Man	
302	Week 4	0	40 hrs	3.13 days	Wed 4/20/16	Mon 4/25/16	301	Tech Lead,Project Man	

Project: Pro Forma Project Plan Date: Mon 4/21/14	Task		External Milestone		Manual Summary Rollup	
	Split		Inactive Task		Manual Summary	
	Milestone		Inactive Milestone		Start-only	
	Summary		Inactive Summary		Finish-only	
	Project Summary		Manual Task		Deadline	
	External Tasks		Duration-only		Progress	

Appendix B – Table of Responsibilities for Deliverables

Del #	Task Per SOW	Subtask Per SOW	Name	Deliverable Description/Definition	Deliverable Owner
1	1	1.1	Initial Draft Project Schedule	Draft Project Schedule to be delivered by Advanced.	Advanced
2	1	1.1	Updated Project Schedule	Project Schedule updates are performed throughout the project. The schedule is updated for refinements to tasks, and percent complete inclusive of resource updates and timeframe updates. Both parties will commit to staffing and resources to meet a rolling 3-month window.	Advanced
3	1	1.2	Invoice Review & Approval	Review and approval of invoices for payment on a timely basis.	CITY
4	1	1.1	Risk Management Plan	Jointly developed plan that defines how project risks will be logged, prioritized, assigned and managed to closure using a jointly agreed resolution strategy. Risk Log will be reviewed at project status meetings.	Advanced
5	1	1.1	Communication Plan	Jointly developed plan that defines the Project Strategy for communicating internally within the Project Team.	Advanced
6	1	1.1	Change Management Plan	CITY owned plan that defines the strategy for communicating with employees and externally.	CITY
7	1	1.1	Change Order Process	Defines how changes to project scope will be logged, approved, and managed as agreed to by both parties.	Advanced
8	1	1.1	Training Plan	Jointly developed plan that defines CITY resources to be trained, the courses to be delivered, materials, locations, facilities and other resources.	Advanced
9	1	1.1	Test Plan	Jointly developed plan that defines CITY's testing phases.	Advanced
10	1	1.1	On Site Facilities	CITY will ensure that Advanced has working space and Internet access while the Advanced project team is on site.	CITY
11	1	1.2	Weekly and Monthly Status Meetings & Reports	Project meetings for Advanced and CITY. Project core team members to discuss work in progress, issues, risks, actions, near-term planned activities and associated resource commitments. Status reports to document project progress.	Advanced
12	1	1.3	Quarterly Sponsor Meeting	Meeting attended by Advanced and CITY Project Manager and Project Sponsors to review project status.	Advanced
13	3	3.1	Hardware ready for Software Installation	Application and database server are on CITY network and the operating system and database software have been loaded.	CITY
14	3	3.1	Project Kick-Off Meeting Conducted	On-Site kick-off meeting held with the project team.	Advanced
15	3	3.1	CIS Infinity Server Installation	Installation of CIS Infinity on CITY servers. City will monitor process and perform physical install. Advanced will provide oversight of the installation.	Advanced/ CITY
16	3	3.1	Installation Training	Installation training for technical personnel.	Advanced
17	3	3.1	Desktop Client Installation	CITY to install client on remaining desktops.	CITY
18	3	3.1	Installation Sign-off	Sign-off of that all installation activities are complete.	Advanced
19	3	3.1	CustomerWise Overview and Set up	Advanced will provide CITY with an overview of CustomerWise, the online tool for documenting and tracking issues as part of the overall implementation. CITY users will be provided with user ids and passwords which also provide access to the Software Entity relationship diagrams and the Data Dictionary.	Advanced
20	3	3.1	Training Courses Syllabus	Document that outlines the duration, prerequisites	Advanced

Del #	Task Per SOW	Subtask Per SOW	Name	Deliverable Description/Definition	Deliverable Owner
				and topics to be covered during the Advanced delivered standard training courses.	
21	3	3.1	Project Team Contact List	Project listing of all Advanced and CITY project team members' contact information.	Advanced
22	3	3.1	System Overview Training	System overview training for core project team members.	Advanced
23	3	3.1	Functional and Data Conversion Discovery Workshop Agendas	Documents that outline the business and conversion processes to be discussed during the Functional and Data Conversion Discovery Workshops.	Advanced
24	3	3.2	Data Requirements for Functional Workshops	CITY to provide business process documentation as identified in Subtask 3.2.	CITY
25	3	3.2.1	Functional Discovery Analysis Workshop Conducted	Sessions that will assist Advanced in learning how CITY conducts business as well as educating CITY about the features and limitations of the Software. Advanced will lead the sessions with CITY business process experts participating.	Advanced
26	3	3.2.1	Functional Discovery Document	Document that captures all learning and understanding gained in the Functional Discovery Analysis Workshops. Document will serve as a template for configuring the Software. CITY will review and approve the document.	Advanced
27	3	3.2.2	Legacy System Conversion Information	CITY to provide, where available, the key information to assist Advanced in developing the conversion programs and activities. Legacy CIS table layouts, ERDs (if available), screen shots, baseline accounts etc. to be provided by CITY.	CITY
28	3	3.2.2	Data Conversion Discovery Analysis Workshop Conducted	Sessions that will assist Advanced in determining the best approach to converting legacy data. Advanced will lead these sessions with CITY technical and conversion/legacy data experts participating.	Advanced
29	3	3.2.2	Data Conversion Plan	Jointly developed plan that defines detailed processes and tools that will be utilized for the conversion and includes data mapping, legacy data quality assessment, data cleansing, technical design, development and testing. It will also define timing for when data cleansing will be complete as well as defining the amount of historical data that will be converted. The Plan will also identify data conversion validation parameters that define how the source and target data will be reviewed and validated as being correctly extracted.	Advanced
30	3	3.2.2	Data Cleansing and Initial Data Extract from Legacy CIS	CITY to perform data cleansing activities as identified during the Technical/Data Conversion Discovery Workshop. CITY to provide an initial extract of Legacy CIS data in the agreed upon format to Advanced. Data extract from the legacy system will be repeated for each test conversion. Advanced will support CITY where required.	CITY
31	3	3.3	Interface/Modification Discovery Workshop Agendas	Documents that outlines the items to be discussed during the Interface/Modification Discovery Workshop.	Advanced
32	3	3.3	Interfaces/Modification Workshop Conducted	Session that will aid Advanced in understanding modification requirements and the third party systems' interfacing capabilities to determine the best approach for interfacing with the identified third party systems.	Advanced
33	3	3.3	Technical Specification for Interfaces/Modifications	Technical Specifications for interfaces/modifications identified in Task 2.1 of this Statement of Work.	Advanced

Del #	Task Per SOW	Subtask Per SOW	Name	Deliverable Description/Definition	Deliverable Owner
34	3	3.4.1	Reports Discovery Workshop	Sessions to review the reporting requirements of CITY. Advanced will lead the sessions with CITY business process experts participating.	Advanced
35	3	3.4.2	Bill Print Discovery Workshop	Session to review of all bill print types/notices/receipts including a review of the bill printing and bill re-printing processes. Advanced will lead the sessions with CITY experts participating.	Advanced
36	3	3.4.2	Bill Print Specification	Specification for bill print design	Advanced
37	3	3.4.3	Infinity.Link Discovery Workshop	Session that will assist Advanced in learning how CITY will deploy the customer web portal and educating CITY about the features and limitations of the Software. Advanced will lead the sessions with CITY business and technical experts participating.	Advanced
38	3	3.4.3	Infinity.Link Technical Checklist	Documents that captures the technical environment in which Infinity.Link will be deployed. CITY to complete the checklist with Advanced's assistance.	CITY
39	3	3.4.3	Infinity.Link Discovery Document	Document that captures all learning and understanding gained in the Discovery Workshop. Document will serve as a template for configuring Infinity.Link. CITY will review and approve the document.	Advanced
40	3	3.5.1	Initial Data Conversion Load	Loading of initial conversion by Advanced on CITY's system.	Advanced
41	3	3.5.1	Baseline Accounts	CITY, with Advanced's assistance will identify baseline accounts to be used for testing during the Functional Test phase. These accounts will also be used to validate the conversion.	CITY
42	3	3.5.1	Data Validation Results	Report that documents the results of the agreed upon conversion validation parameters for both the source and target data.	Advanced
43	3	3.5.1	Initial System Configuration Rollout	Configuration of the control forms and rates by Advanced utilizing the approved Functional Discovery Document.	Advanced
44	3	3.5.2	Legacy Data Refreshes	CITY to provide Advanced an extract of Legacy CIS data in the agreed upon format throughout the testing phases (Conversion, Functional, ITC1, ITC2, UAT), as required. A minimum of six data refreshes are anticipated throughout the project, which include the data refresh prior to Go Live. AUS will support CITY where required.	CITY
45	3	3.6	Training Workbooks	Standard Training Workbooks that will be used to facilitate Core Team and End User training execution for each training course identified in the Training Plan.	Advanced
46	3	3.6	Core Team Training	Execution and completion of Core Team training per the Training Plan. Training will include CustomerWise training.	Advanced
47	3	3.7	Reports Matrix	Document that lists all reports provided by CITY and designates those reports that are standard within CIS Infinity and those that require modification.	Advanced
48	3	3.7	Custom Reports Delivery	Delivery of custom reports identified in the Reporting Matrix.	Advanced
49	3	3.8	Interface Configuration and Testing	Configuration and testing of configuration type interfaces that have been identified in Task 2.2 of this Statement of Work.	Advanced
50	3	3.8	Code, test and rollout of Interfaces/Modifications	Code Modifications and Interfaces as described in Task 2.1 of this Statement of Work. Advanced developed interfaces will be tested by Advanced before integrating into CITY environment.	Advanced
51	3	3.9	Test Scripts Execution	CITY to conduct testing as outlined in the Test Plan, document test results (pass/fail) and log any issues in	CITY

Del #	Task Per SOW	Subtask Per SOW	Name	Deliverable Description/Definition	Deliverable Owner
				CustomerWise for resolution by Advanced.	
52	3	3.9.1	Functional Test - Data Conversion Data Load & Validation	Loading of conversion data by Advanced on CITY's system. Includes audit report that documents the results of the agreed upon conversion validation parameters for both the source and target data.	Advanced
53	3	3.9.1	Rates Testing Matrix	Advanced will furnish a document outlining all necessary rates and rate scenario's to be tested. CITY is responsible for testing and confirming all rates and rate scenarios are accurate and reflect the billing requirements of CITY.	Advanced
54	3	3.9.2	Integration Test Scripts	Generic Integration Test scripts provided by Advanced. Scripts are designed to test the standard interfaces.	Advanced
55	3	3.9.2	Integration Test - Data Conversion Data Load & Validation	Loading of conversion data by Advanced on CITY's system. Includes audit report that documents the results of agreed upon conversion validation parameters.	Advanced
56	3	3.9.3	User Acceptance Test - Data Conversion Data Load & Validation	Loading of conversion data by Advanced on CITY's system. Includes audit report that documents the results of the agreed upon conversion validation parameters for both the source and target data.	Advanced
57	3	3.10	End User Training & Sign off	Execution and completion of End-User training per the Training Plan.	Advanced
58	3	3.11	Go/No Go Criteria Document	Criteria that will be adhered to enable cutover to Production to proceed. It includes metrics to evaluate project management readiness, business solution testing readiness, business readiness, IT infrastructure readiness and reorganization/people readiness.	Advanced
59	3	3.11	Go / No Go Decision Document approved for Go Live	Defines the outcomes of application readiness based on the defined Go/No Go Criteria document and Cutover Plan defined. The result will be a decision to Go-live or to identify issues that will need to be resolved prior to Go-Live or can be deferred to post go-live. The decision to transition to Go Live will be approved when the items defined in the Cut-Over and readiness assessment has been successfully achieved and there are no significant agreed upon issues that will impact transition to Production.	Advanced
60	3	3.12	Cutover Plan	Defines steps and responsibilities of Advanced and CITY during transition to Production. Includes steps to achieve system balance and includes a conversion cutover plan.	Advanced
61	3	3.12	Go Live - Data Conversion Data Load & Validation	Loading of conversion data by Advanced on CITY's system. Includes audit report that documents the results of the agreed upon conversion validation parameters for both the source and target data.	Advanced
62	3	3.12	Go Live	System is operating and being used. Balancing of legacy and Advanced CIS has been validated and signed-off by CITY.	Advanced
63	3	3.13	Completion of Post Live Support	Conclusion of Post live support period, which includes remote and/or onsite presence.	Advanced
64	3	3.13	Support Transition Meeting	A transition meeting to transfer from the project implementation phase to the support phase of the contract.	Advanced
65	3	3.13	Completion of Post Live Interfaces	Completion of interfaces designated as Post Live	Advanced

Appendix C – Sample Communication Plan



CIS Infinity
Communication Plan

CLIENT

CIS Infinity Communication Plan

Jul-07-2014

Principle Author: PM Team

The undersigned individuals have reviewed this document and are in agreement with its content.

Document Approval

Project Role	Team Member	Signature / Date of Signature
Client Project Manager		
		Date:
Advanced Project Manager		
		Date:
(other)		
		Date:

Version History

Version	Status	Date Issued	Author(s)	Notes
V1.0	draft			

Table of Contents

Preface.....	4
Overall Communication Approach	5
1. Weekly Team Meetings (Advanced/Client).....	5
2. Monthly Project Status Review	6
a) Monthly Project Status Report:	6
3. Monthly Risk Management Plan Review.....	6
4. Quarterly Sponsor Reviews.....	7
5. Escalation Process	8
6. Communication Tools	9
a) CIS Project Plan:	9
b) Risk Management Plan:	9
c) Change Management Plan:.....	9
d) Test Plan:.....	9
e) Training Plan:.....	10
f) Conversion Plan:	10
g) Organizational Readiness Plan:.....	10
h) Go-Live Plan:	10
i) Monthly Project Status Report:	10
j) Key Deliverables Report:	10
k) CIS Open Issues Report:	11

Preface

This document has been created to provide client with an approach to communication that will ensure a successful project at Go Live.

Overall Communication Approach

There will be several methods through which communication will take place during the CIS implementation project. There will be Weekly and Monthly Review meetings, Monthly reports, Quarterly Sponsor Review meetings, an Escalation Process, and several tools within those processes that will be updated to ensure a clear understanding of our project standing relative to an on-time, on-budget delivery.

I. Weekly Team Meetings (Advanced/Client)

The Weekly Team Meeting between Advanced Utility Systems (Advanced) staff and Client staff will be at a pre-set day and time. Attendees will include key Advanced team members (Project Manager, Conversion Lead, and Technical Lead) along with technical/functional area experts as needed throughout the project. Weekly attendees for Client should include Client Project Manager, Client Core Team, and subject matter experts, as needed.

The topics that will be covered during the Weekly Team Meetings will ensure a clear understanding of project status is listed below. The primary focus during the Weekly Team Meetings is to review these areas for recent performance and upcoming areas of work in the next two weeks. More in-depth, broad-based reviews of these same areas will be completed each Month at the Monthly Project Status Review.

Weekly Team Meeting Areas for Review:

- Key Deliverables Report
- CIS Project Plan
- CIS Open Issues/Action Items
- Risk Management Plan
- Two week look-ahead for resource planning

Key Deliverables Report: The Key Deliverables Report is a summary of all the key deliverables identified in the CIS plan. For each deliverable item a responsible person is identified with the original due date, revised date, and completion date, current item status, and comments/notes pertaining to the deliverable.

CIS Project Plan: The CIS Project Plan will be provided by the Advanced Project Manager for weekly review of the last week's project work and the work in the short-term (approximately two week) work horizon.

CIS Open Issues/Action Items: Issues found within the Infinity software and add-on products will come from CustomerWise – an issue tracking tool which Advanced uses internally and externally with Client teams to track issues. All items in the list that have a status of “Open” will be reviewed, based on priority. Unassigned items are assigned and given a priority and due date. All prior assigned items are reviewed as for status and closure based on priority.

Additional project Issues and Action Items that are not specific to the software will be tracked in a section of the Monthly Report. Owners will be assigned and the Issues and Action Items will be reviewed on a weekly basis.

Risk Management Plan: The Risk Management Plan will be reviewed specifically regarding any new risks that have come up or significant changes in risk status during that week of the project. If a new risk is identified, it is documented in the report, given an impact and priority, and a mitigation plan. Similarly, if there is a significant change to the status of a risk, the changes are documented and alternative plans are made or mitigation plans are carried out as quickly as possible to minimize the potential impact to the project.

2. Monthly Project Status Review

The Monthly Project Status between the Advanced staff and Client staff will be at a scheduled time each month. Attendees will include the Advanced Project Manager and Client project manager. Any additional key Advanced or Client team members (e.g., Application Consultant, Tech Lead, Core Team members, or special area experts) will attend if needed.

The primary deliverable for the Monthly Project Status Review is the Monthly Project Status Report. The Monthly Project Status Report will include the pieces listed below. Many of the same areas that are reviewed in the Weekly Team Meetings will be reviewed in the Monthly Review, but in more depth and looking farther out into the project schedule.

a) Monthly Project Status Report:

- A percent complete will be provided for the project thus far. Any variances in schedule or work will be provided if the percent complete is different than what was expected from the prior month.
- An expected percent complete will be forecast for the end of each of the project's upcoming months.
- The current Risk Management Plan will be included and risk status will be reviewed. Additionally, a once monthly Risk Management Plan review will take place in a separate meeting to ensure that Risks are being dealt with in a proactive fashion (see section 3 below).
- The current Key Deliverables Report will be included and reviewed in detail for the next one to two months of project schedule.
- The CIS Project Plan will be included and reviewed in detail for the next one to two months of the project schedule.
- The CIS Open Issues report from CustomerWise will be reviewed specifically for high priority items and any potential changes in project scope. If necessary, those items will be added to the Risk Management Report and the monthly Risk Management Report Review. Additional Issues and Action Items that are not software specific will be reviewed in a separate section in the Monthly Report.

3. Monthly Risk Management Plan Review

The Risk Management Plan will be reviewed on a monthly basis between Advanced and Client project managers. In this monthly review, ALL risks will be analyzed to be updated, closed, or continued on in their current status. Any new risks that the teams have identified can also be added and prioritized at this time.

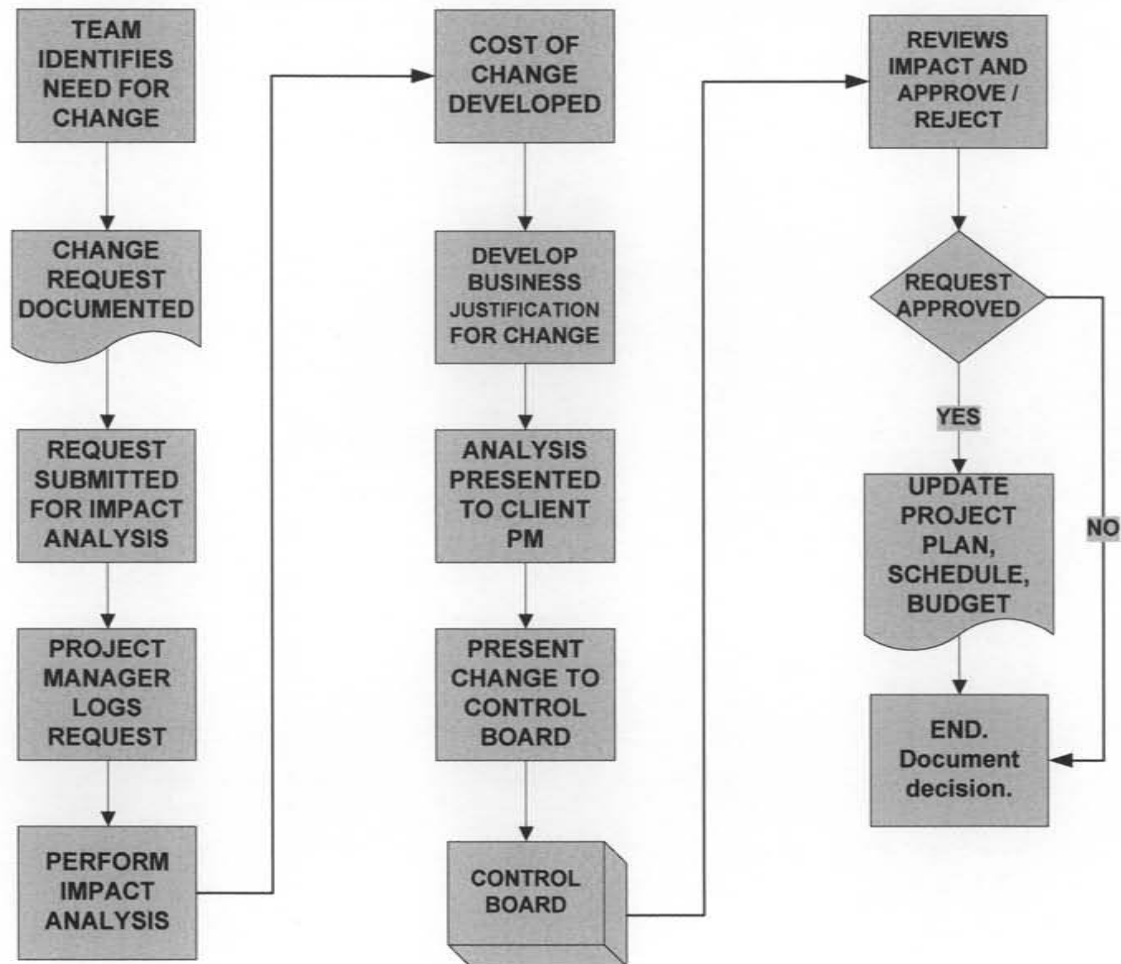
4. Quarterly Sponsor Reviews

The Quarterly Sponsor Review will include Advanced and Client Project Managers and Project Sponsors. This review will take place at Client site once a quarter. The intent of the Quarterly Sponsor Review Meeting is to ensure that the project is on-time and on-budget, and that Executive Management for both Advanced and Client have a clear view into the project status. The primary tool that will be used to do the Sponsor Review is the latest month's Monthly Project Status Report. The intended level of attention to detail during this meeting is to identify areas of concern or material change to the project. A MS PowerPoint deck will be created to highlight the following areas:

- The percent complete for the overall project thus far. Descriptions of any material variances in schedule or work will be provided if the percent complete is different than what was expected from the prior month.
- An expected percent complete will be forecast for the end of each of the project's upcoming months.
- The current Risk Management Plan will be included and risk status will be reviewed, based on priority of risks.
- The current Key Deliverables Report will be included and reviewed for any areas of concern or material change to the project.
- The CIS Project Plan will be included and reviewed for any areas of concern or material change to the project.

5. Escalation Process

The primary level of issue resolution on the CIS project is with Advanced and Client project managers. In the event of an issue that cannot be resolved between these two parties, the Project Sponsors for Advanced and Client will be contacted to resolve the problem.



6. Communication Tools

Advanced and Client will use several different tools in the course of the CIS project. Some of the tools created will be used in the periodic review meetings (e.g., the CIS Project Plan, the Risk Management Report, the Key Deliverables Report). Some tools will be created once and be more static in nature (e.g., Configuration Management document, the Communication Plan). Finally, there are tools that will be continually updated throughout the project as guides to future effort (e.g., Test Plan, Training Plan, Go-Live Plan). Descriptions of these tools are included here.

a) CIS Project Plan:

This is a project schedule documented using the MS Project software. It contains the basic Work Breakdown Structure for the project. The work involved in the project is broken down into detailed tasks which can be rolled up into summary tasks. Dependencies throughout the project are provided as links between the tasks such that the project managers can project the future impact of schedule changes to a project. Resource names, task durations and dates are included within this plan. It is to be updated weekly and used as a primary tool in the Weekly Team Review Meetings, Monthly Project Status Report and Meeting, and the Quarterly Sponsor Reviews.

b) Risk Management Plan:

The Risk Management Plan lists the significant issues and risks to the CIS project. Each risk is described, and an impact is defined were the risk to occur. Each risk is then prioritized in terms of severity and given one of several risk mitigation strategies. The risk mitigation strategies can include several different approaches to provide a reduced impact of risk for the overall project.

c) Change Management Plan:

The Change Management Plan is created to assist Client in having a successful adoption of CIS Infinity by their staff. This Plan will include internal communication strategies on the party of Client (e.g., staff newsletters). It will also include more in-depth strategies on how to include end users in significant enough exposure to the system to reduce overall strain and increase the chances of successfully using the software at Go-Live.

d) Test Plan:

The Test Plan document has been created to provide Client an approach to testing that will ensure a quality product at go-live. There will be four phases in the overall testing approach: Functional Test, Integration Test, Stress, and User Acceptance Test. There will be test scripts written for each of these phases. The progress of all Test Plan phases will be tracked in a Test Matrix to ensure complete testing of the system.

e) Training Plan:

The Training Plan provides Client with a guide to training their Core Team and End Users such that the staff will be able to successfully use CIS Infinity at Go-Live. The training will include Core Team Training, Technical Training, and End User Training. Specifically, parts of the Training Plan should be linked to the Test Plan to increase On The Job Learning (OTJL).

f) Conversion Plan:

The Conversion Plan contains the steps Client will follow during their Go-Live conversion process. This will be used repeatedly as a guide to early cuts of the converted data to ensure that Client team is ready to execute the conversion at the time of Go-Live.

g) Organizational Readiness Plan:

The Organizational Readiness Plan contains all of the pieces necessary for Client to successfully go live on the software. This Plan will include pieces of many of the other documents listed here (e.g., Change Management tasks, CIS Project Plan tasks, Hardware and Software environment information). This plan describes all of the key pieces for the Go/No-Go decision point one month before Go-Live.

h) Go-Live Plan:

The Go-Live Plan is a checklist created to assist Advanced and Client in having a successful Go-Live process when taking the legacy system to production on CIS Infinity. This Plan will include a list of specific tasks, roles and responsibilities specific to the week before and the two weeks after Go-Live. This plan typically begins development once configuration is complete.

i) Monthly Project Status Report:

The Monthly Project Status report is the document used to ensure a clear understanding between the Advanced and Client Project Managers of the status of the project related to an on-time, on-budget delivery. It contains several pieces of information (please refer to the Monthly Project Status Review in the prior section for more detail).

j) Key Deliverables Report:

See Section 1 above.

k) CIS Open Issues Report:

See Section I above.

Appendix D – Sample Change Order



CIS Infinity Change
Order sample

CLIENT

CIS Infinity Change Order

Date: Jul-07-2014

Change ID: Change Order #

Description: [Description Title of Change]

Authorization

Advanced Utility Systems is authorized to proceed with the change for Client.

Project Role	Team Member	Signature / Date of Signature
Client Project Manager		
		Date:
Advanced Project Manager		
		Date:
(other)		
		Date:

Change Details

Enter details for change here.

Estimate of Hours / Costs *

a) Requirement	b) Hours	c) Cost (\$USD)
Total		\$

* Net of applicable taxes and associated expenses

Please note that these hours represent an estimate to successfully complete the required configuration for [Client].

Schedule "B"
Fee Structure and Payment Schedule

The total Services fees payable under this Software Implementation Services Agreement are \$941,850.00, inclusive of travel related expenses. Amount is not inclusive of those elements which are specifically excluded as described in the Software Implementation Services Agreement.

	Description	Quantity/ Hours	Cost
Services Fees	Project Management	700	\$105,000
	Discovery	500	\$75,000
	Data Conversion	600	\$90,000
	Configuration	1180	\$177,000
	Core and End user Training	800	\$120,000
	Interfaces	854	\$128,100
	Modifications (including Reports)	285	\$42,750
	Post Live Support	160	\$24,000
	Total Implementation Service Fees	5079	\$761,850
Estimated Travel Related Expenses			\$180,000
	Total		\$941,850

Implementation Service Fees Payment Milestones

CITY will be billed monthly by Advanced for milestones completed during the month. The service fees milestones are as follows:

Reference	Milestone – CITY will be billed monthly for all milestones completed during the month (i.e. one invoice per month).	Invoice Amount
MP1	Project Management Month 1	\$ 13,500
MP2	Project Management Month 2	\$ 7,362
MP3	Project Management Month 3	\$ 7,362
MP4	Project Management Month 4	\$ 7,362
MP5	Project Management Month 5	\$ 7,362
MP6	Project Management Month 6	\$ 7,362
MP7	Project Management Month 7	\$ 7,362
MP8	Project Management Month 8	\$ 7,362
MP9	Project Management Month 9	\$ 7,362
MP10	Project Management Month 10	\$ 7,362
MP11	Project Management Month 11	\$ 7,362
MP12	Project Management Month 12	\$ 7,380
MP13	Installation of CIS Infinity Sign off	\$ 10,800
MP14	Delivery of Functional Discovery Workshops	\$ 45,000
MP15	Functional Discovery Document Signoff	\$ 22,500
MP16	Delivery of Data Conversion Workshop	\$ 13,500
MP17	Data Conversion Plan Sign off	\$ 9,000
MP18	Interface & Modification Workshop	\$ 13,500
MP19	Functional & Technical Specification Signoff - Modifications & Development Interfaces	\$ 22,500
MP20	Delivery of Reports Matrix	\$ 6,750
MP21	Initial Conversion Rollout	\$ 40,500
MP22	Initial Configuration Rollout	\$ 18,000
MP23	Completion of Core Team Training	\$ 27,000
MP24	Data Refresh # 2 Load (Functional Testing)	\$ 13,500
MP25	Functional Testing Sign off	\$ 36,000
MP26	Custom Reports Completion & Signoff	\$ 6,750
MP27	Data Refresh # 3 Load (ITC #1)	\$ 9,000
MP28	Integration Testing Cycle 1 Sign off	\$ 27,000
MP29	Deployment of Modifications	\$ 27,000
MP30	Deployment of Configuration Type Interfaces	\$ 22,500
MP31	Deployment of Development Type Interfaces	\$ 33,840
MP32	Data Refresh # 4 Load (ITC #2)	\$ 9,000

MP33	Integration Testing Cycle 2 Signoff	\$	18,000
MP34	Data Refresh # 5 Load (UAT)	\$	9,000
MP35	User Acceptance Testing Sign off	\$	18,000
MP36	Completion of Week 2 End User Training	\$	20,250
MP37	Completion of Week 4 End User Training	\$	20,250
MP38	Completion of Week 6 End User Training	\$	20,250
MP39	Completion of Week 9 End User Training	\$	20,250
MP40	Go Live	\$	9,000
MP41	Completion of Month 1 Post Live Support	\$	21,600
MP42	Completion of Interface 2.1.2 - Munis Master Customer Database	\$	8,775
MP43	Completion of Interface 2.1.5 - Munis Work Management System	\$	12,150
MP44	Final System Acceptance	\$	76,185
	Totals	\$	761,850

Schedule "C"
Sample Form Change Order

Change Order

(a) Contact & General Information

Client	_____	Date	_____
Client	_____		_____
Contact	_____	Software	_____
		Application	_____
		n	_____
Client Email	_____		_____

(b)

(c) Description of Work

Attachments: ☐

(d) Client Approval

000

\$0.00

Chargeable Hours**Rate****Amount**

000

000

Non-Chargeable Hours**Total Hours****Client Signature****Date**

Your signature serves as an acceptance of the "Amount" listed above as it relates to the description of work contained in this Change Order. Your signature also indicates you have reviewed and agree to the scope of work as detailed in any accompanying enclosures or attachments. This signed document indicates that you have provided all of the accurate information necessary to produce the work as stated in the above Change Order.

(e) Internal Use Only

Customer #

Application #

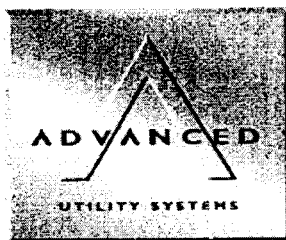
Originated by
#

PO#

000000
0

Schedule “D”

Documents from Consultant’s Proposal including the cover letter, pages 1-5, 13-132, and 142-156, the proposed Project Plan (pages 1-15), responses to the General and Technical Specifications (pages 1-12), and responses to the Utility Billing Specifications (pages 1-20).



January 8, 2013

Finance/Purchasing Division
Will Hobart
Purchasing Agent
701 E. Broadway, 5th Floor
Columbia, MO 65201

Re: COFERS RFP # 158-2012

Dear Mr. Hobart:

I would like to thank you for providing Advanced Utility Systems, a division of N. Harris Computer Corporation ("Advanced") with the opportunity to respond to the City of Columbia's (the "City's") RFP for a Columbia Financial Enterprise Resource System (COFERS). As a best in breed Customer Information System (CIS) solution provider, our proposal addresses the City's Customer Information system line of business requirements. I am pleased to provide one (1) original, along with five (5) printed copies and one (1) electronic copy of our proposal.

Advanced offers proven customer information and utility billing software, CIS Infinity®, which we have successfully implemented in over 120 organizations across North America and the Caribbean. It is powerful, feature-rich, flexible software. Along with the core modules of cash processing, billing, reporting and collections that support revenue management activities, it includes many features (contact management, alerts, bill formatting, inventory management) designed to allow the City to provide exceptional customer service.

I have reviewed and accepted the Terms and Conditions set forth in the RFP. However; in the event that Advanced is selected as the awardee for the contract to be awarded under this RFP, we request an opportunity to meet with representatives of the City to review, negotiate, and mutually agree to all contractual terms and conditions that will govern the services to be provided. Advanced is prepared to promptly devote resources to such discussions so that a mutually acceptable contract may be concluded in an expeditious manner that aligns with the anticipated project schedule. Our submission of a proposal in response to the RFP should be considered a commitment to provide the services sought under a fair and reasonable agreement between the parties. We are mindful that the City as a public entity may be required by statute and regulation to include certain clauses in any final contract. We look forward to working with the City to finalize contract terms and conditions for this project that adequately address and protect the core interests of each party.



I also certify that as of the proposal submission date, we are compliant with all applicable Federal and State laws and regulations and that our software meets Payment Card Industry (PCI) Data Security Standards (DSS) as evidenced by our inclusion in the PCI Security Standards' List of Validated Payment Applications:

https://www.pcisecuritystandards.org/approved_companies_providers/vpa_agreement.php

This proposal is valid for 180 calendar days from the proposal deadline date of January 11, 2013.

I, Peter Fanous, Executive Vice President, Advanced Utility Systems, a division of N. Harris Computer Corporation, am the individual who is authorized to negotiate and obligate the organization contractually.

The contact person responsible for this response is as follows:

Lori Hogg
Regional Sales Manager
2235 Sheppard Ave East, Suite 1400
Toronto ON M2J 5B5
(T) (416) 496-0149 Ext 210
(F) (416) 496-3910
lhogg@advancedutility.com

We have learned a great deal about the City from this RFP and welcome the opportunity to meet with the City's team to discuss the details of our proposal.

Sincerely,

Peter Fanous
Executive Vice President, Advanced Utility Systems

1 Executive Summary

As a “best of breed” Customer Information System (CIS) solution provider, Advanced Utility Systems is proposing the implementation of CIS Infinity customer management and utility billing solution along with Infinity.Link, our customer self-service module to meet the City’s utility billing requirements.

Advanced has built its organization around its core competency: serving utilities’ needs with state-of-the-art software and support. Advanced has successfully implemented our solution for 120+ utilities that provide electric, water, sewer, and other utility related services. Advanced’s utility industry focus and our extensive experience in successfully implementing our solution for water utilities like the City enables us to share utility best practices with our customers to ensure a successful deployment and long term use of our solution.

Advanced is committed to establishing a long term partnership with the City. This starts with the successful implementation of our solution and continues with providing high quality ongoing support. Our experienced implementation team will deliver a solution that will meet and exceed the City’s needs.

We would like to highlight the advantages of our solution that we believe make Advanced the right utility billing solution partner for the City.

Comprehensive “COTS” Functionality: CIS Infinity has unmatched functionality available standard which means the City can meet its needs and more without extensive customization to complete core business process functions.

Configuration not Customization: Every utility has unique business processes that must be supported by their systems without having to rely on their vendor to configure changes. All rules, rates, and workflows are control table driven, not “hard coded” to meet the requirements of a single customer. By replacing custom coding with sophisticated configuration tools, implementation is faster, more reliable and reduces your total cost of ownership. When new requirements emerge in the future, the City can use in-house administrative staff to make the changes, eliminating custom coding projects that can result in unexpected, budget-breaking costs.

Quick Access to Customer Information: CIS Infinity is easy to use and navigate. Users can access key information on a single screen – no need to jump from screen to screen to obtain information and perform routine billing functions. This makes training and user adoption faster and easier and helps CSR’s obtain information they need for first call resolution. Additionally with the deployment of Infinity.Link, Advanced’s real time integrated customer web portal, the City will enable its customers to conduct their utilities business on a 24 x 7 basis by offering electronic billing and payment and other customer self-service capabilities, thereby reducing the number of call in requests from customers.

Workflow Automation and Routing: CIS Infinity’s “Actions” and workflow will enable the City to reduce manual processes and improve operational efficiencies through system

automation. Collection processes (e.g. customer reminders, penalties), service order generation (e.g. move in/out), and more can all be automated through use of user defined Actions.

Flexible Reporting: CIS Infinity has a powerful standard reporting engine and provides five levels of reporting. CIS Infinity enables end users (without IT assistance) to access the data within the system. This will provide City management with the information they need for enhanced performance management.

Reliable & Current Technology: CIS Infinity is a client server application that was built using Microsoft development tools and utilizes a relational database management system that supports ODBC. As a Windows application, the client software resides on the desktop and integrates with all industry standard desktop productivity tools including Microsoft Office. The architecture results in proven reliability, and the skill sets required for the Windows platform are to find and easy to learn. Advanced's technology is consistent with the IT standards of the City which will eliminate the need for the City to require costly specialized resources to support CIS Infinity.

Implementation Excellence: Advanced and our customers have received numerous awards, certifications and recognitions for the quality of our implementations and solutions as noted below. One such award was Best CIS Implementation - CS Week and Electric Light & Power's 2011 Expanding Excellence Awards program - that was awarded to Saint Paul Regional Water Services, MN for the implementation of CIS Infinity.

Total Support: The Advanced solution includes software, implementation services, extensive technical support, regular upgrades and improvements, and the establishment of a solid, productive relationship with the City.

In summary, our products' flexibility, reliability, comprehensive capabilities, easy to use interface, along with our long term commitment to our customers' success are just some of the key reasons why the City should consider Advanced as a partner for your CIS/Utility Billing solution.

We look forward to building a mutually rewarding, long term, partnership with the City and to the opportunity to successfully implement our solution at the City.

2 Company Background

In addition to providing responses to the following items, the Vendor must complete the Company Background Form in section 6.5 of this RFP.

Vendors must provide information about their company so that the City of Columbia can evaluate the Vendor's stability and ability to support the commitments set forth in response to the RFP. Information that Vendors should provide in this section are as follows:

1. The company's background including a brief description (*e.g.*, past history, present status, future plans, company size, etc.) and organization charts.

Advanced Utility Systems was established in 1997 to provide Customer Information and Billing solutions exclusively to utilities and municipalities.

Having established itself in Ontario, Advanced has become a reliable and proven organization for water, electric, gas and sanitation service providers in the diverse CIS market. Today, Advanced has more than 120 successful customer deployments across North America, Central America, South America and the Caribbean which proves our depth of experience when it comes to delivering a market leading solution.

Advanced has built its organization around its core competency: serving utilities' needs with state-of-the art software and support. Technically strong, approximately 90% of its staff is devoted specifically to Development, Support, and Customer Service.

Wholly owned by N. Harris Computer Corporation (Harris), Advanced is recognized as its own entity within the organization. Harris in turn is governed by Constellation Software Inc. a publicly traded company on the Toronto Stock Exchange (CSU).

Advanced provides its customers with the commitment and focus of a dedicated partner with the financial strength of a large organization.

Advanced continues to add new clients at a steady pace. In growing our business, we do not want to lose sight of our most important asset – our existing client base. Advanced was built on client references. In the software world, word-of-mouth is the strongest endorsement any company can achieve and Advanced vigorously pursues this approach. At the same time, developing innovative functionality, expanding existing modules and releasing new software enhancements every three months are major objectives. We want to ensure that our clients have the most up-to-date resources and tools at their fingertips and that they are equipped with current technology.

The goal of Advanced Utility Systems is to provide the most user-friendly, functionally rich and technically robust CIS and utility billing system to the market.

Key to our success has been a strong strategic product vision and outstanding execution of that vision within our product suite.

ADVANCED
UTILITY SYSTEMS

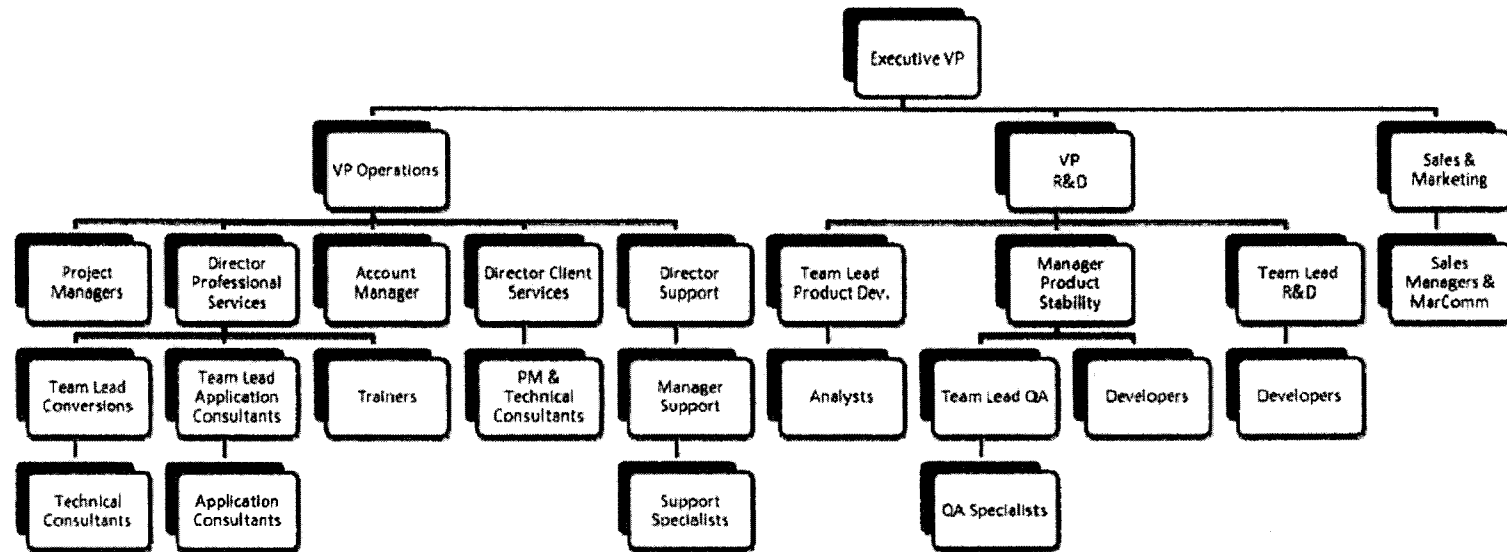
Advanced's strategic vision with the CIS Infinity product suite is to build upon our existing rich product functionality for the electric, water and gas utility industry. We are constantly analyzing significant trends in the North American and Caribbean CIS and utility billing software industry. By listening to our clients and anticipating their needs, we offer the most functionally rich CIS system in our market space. To further enhance our core CIS product suite Advanced evaluates the market and partners with leading industry organization's which offer complementary solutions.

Advanced derives its product direction by listening to our client base - primarily with the assistance of our executive steering committee, our functional and regional user groups, our Support center and our annual users conference. Our experienced staff contributes to our product direction by sharing their best practices learned through client implementations and their strong knowledge of the utility industry.

Organization Chart

Advanced invests heavily in developing, testing, implementing and supporting CIS Infinity. 93% of our team members are a part of the Professional Services, Research and Development or Support department. Our organization is focused only on adding value to your utility billing solutions. Advanced will prime the proposed solution.

The structure of our organization is outlined in the following chart:



3 Proposed Solution

As the City of Columbia is contemplating a City of Columbia-hosted versus Vendor-hosted solution, aspects of the proposed solution to be provided should be clearly delineated where they vary between these two approaches in the sections below.

3.1 Application Software

The Vendor is required to provide a general description of the application program product and how it will meet requirements of this RFP. This section must address, at a minimum, the following items:

1. Describe your overall proposed technology solution.

The following provides in detail, the features and capabilities of CIS Infinity.

CIS Infinity is not modular and all functionality is included as part of the base package as listed below:

Functionality	
- Alerts/ Action - Advanced Reports - Billing - Auto Final Bill - Bill Re-print - Bill Journal - Cancel-Re-bill Process - Cycle Billing - Estimating - Exceptions - Final Billing - Pre-Exceptions - Regular Billing - Manual Billing - Flat Rate Billing - Service Add/Remove - Cash Register - Bill Payment - Credit Card Authorization - OCR/Barcode Scanning - Receipt Printing - Sundry Payments - Collections - Arrangements - Assistance Agency - Bankruptcy - Credit Rating - Disconnect/Reconnect - Late Charge /Discount	- Financial Reports - Inventory Management - Backflow Device - Electric Meter - Gas Meter - Instrument Transformer - Key Management - Propane Tank - Solid Waste - Streetlight - Water Heater - Water Meter - Transformer/Loading - Loans - Memberships - Meter Reading - Move In/Move Out - Multiple Receivables - New Services - Payment Processing - Adjustments - Bank File Import - Deposits - Payments - Penalties - Post Dated Checks - Third Party File Import - Period End Routines

Notices Post-Date Inquiry Write-Offs 3rd Party Notification • Contact Management • Correspondence Management • Customer Service Inquiry	• Point of Sale • Pre-Authorized Payment • Rate Management • Scheduler • Service Orders • Security
---	---

Account Management

CIS Infinity's user interface is designed to provide access from the account inquiry screen to all customer information with the click of a mouse. CIS Infinity retains all customer history including calling history, correspondence notes, comments, service orders, usage, credit and payment for an unlimited period of time. It can manage single accounts, master accounts and temporary accounts. CIS Infinity also provides access to available and installed service offerings, product offerings, equipment offerings and program offerings.

Utilities need to use the customer account for multi views into account transactions, consumption, payments, billings and adjustments. Account specific notes are readily handled by CIS Infinity. Menus are dynamic and as such users can decide what to call files and how the menus are to be organized.

Navigation throughout CIS Infinity is simple. All information associated with a customer is available on a single, easy to read window. Common functions are available on the toolbar at the top. Below the toolbar is the Customer Information Band, which provides the most commonly accessed data at a glance. Seventeen well-organized tabs provide further information regarding the account. Data associated with that tab is available in the center of the window along with functional buttons. Accounts are located by simply typing the account number at any location throughout the software. A detailed search is available which may be customized to locate particular criteria. Clicking 'More' on the toolbar exposes a browser-like history of the most recently accessed accounts.

Billing Management

With CIS Infinity, you can implement a wide variety of complex billing processes, including

- consolidated bills for large industrial or government clients
- miscellaneous billing for non-utility transactions.
- billing for different types of readings, including meter reads and consumption

Real time transactions eliminate the need for day-end processing. The integration of the customer information component and the billing component of CIS Infinity makes processing adjustments, estimates and final bills quick and easy. You can define your own exception parameters and processes, make special discount and credit arrangements for individual customers, implement alternative tax rates and apply multiple taxes.

Cycle, date and event driven billing schedules are all supported by CIS Infinity. Time and volume based consumption are tracked and recorded through interval meters, while consumption validation and estimation algorithms are handled through customer-based exception checking and billing.

CIS Infinity provides you with simplified billing processes, including cancel and re-bill, bill re-print based on revised consumption history, single bill print from archives and bill register re-print. Bill registers are archived electronically. You have greater precision for exception checking, usage quoting and estimating based on unlimited reading history.

CIS Infinity can be configured to offer different estimating procedures for each service. Bills, deposits and equalized billing can be estimated based on a user-defined formula, for example

- With CIS Infinity you can also track the history of the service address and the previous customer's history for greater estimating precision.

CIS Infinity makes it possible for your organization to offer five different types of pre-authorized payment plans, including equalized and actual billing. CIS Infinity interfaces with all major financial institutions. Users can define the equalized payment quote formula based on consumption history. Payment plan accounts can be automatically reconciled and reminders and/or labels can be produced. Customers are able to choose which days their payments are drawn from their accounts.

Consolidated billing

With CIS Infinity, you can consolidate bills from several accounts in one bill (for example, one bill for a landlord who owns several properties). You can also meet specific billing requirements for certain individuals, regardless of when or how the bill is produced (for example, large-print bills or bills in a language other than English).

Canceling and re-billing

CIS Infinity allows users to cancel and re-bill inaccurate bills in one step. If an adjustment needs to be performed on a bill, the customer service representative can select the bill and request to cancel and re-bill it. When the bill is canceled the software will prompt the user for a new read. When the new read is inserted the bill will be picked up in the billing procedure, re-printed and updated automatically. A customer service representative can choose to cancel and re-bill the entire bill or individual services on the bill. If there is no read available the customer service representative can simply cancel the bill and choose not to re-bill the account.

Bill Cancellation

Undo Save Settings

☐ Cancel Bill as a Whole

Service	Cancel	Reason	Rebill
Electric	☒	Bad read	☒
Water	☐		☐

Service	Meter	Read Type
Electric	00112627	Electric
Water	91918943	Water

Service	Meter	Read Type	Previous Reading	Meter Reading	Read Status	Reading Date
Electric	00112627	Electric	86192.00000	87597.00000		11/11/11 AM

Credit and Collections Management

Collections procedures including penalty pick up are automated based on collection parameters defined by the user. CIS Infinity will build credit ratings based on your specifications. The software stores unlimited collection history for each account, which is quickly accessible through the customer information screen. Collection history is customer specific and aggregates a customer's credit rating based on all of their previous properties. CIS Infinity automatically tracks payment arrangements and their current status, initiates collections procedures (call, notice and print) and assigns follow-up tasks.

Like your Service Order workflow, your Collections workflow can be fully **automated**.

Tasks for other users, letters to customers, service orders, bill messages, and a variety of other actions can be automatically generated based on a customer's collections activity.

In addition, Collection parameters are specifically designed for deposits. CIS Infinity can be configured to provide automated interest pick up with interest applied to either the deposit or the account. CIS Infinity also provides for the set-up of late payment and returned check penalties. The system can also be easily configured to accommodate third party, guarantor and co-signer relationships.

Arrangements may be added from the Customer Account Inquiry form by clicking on the 'Contact' tab. After clicking on the 'Add' button the Customer Account Arrangement window appears which allows for data entry. Once entered, the information appears in the Arrangement list.

DEMO V3 - Customer Account Inquiry

Customer: 00178794
Account: 816408066
VENUS WILLIAMS
7 TENNISWORLD AVE
ANYTOWN, 12345

Balance: \$210.14
Deposit: \$0.00
Last Bill: \$210.14 Due 04/20/06
Plan: Variable - Auto Debit
Next: \$210.14 on the 04/20/06

Active Owner
Credit is Excellent (10)
USER'S CONFERENCE/UTILITY
DC06/OC006

Residential
No Tasks to be completed on file

Customer | Service Address | Customer/Account | Services | Addresses | Reading History | Transaction History | Bills | Comments | Move In/Out | PAP

Deposits | Meter Reading | Contact | Equipment | Supplier | Loans/POS | Collections | Map

Collections | Transactions | Disconnect | Agency/Bankruptcy | Arrangements | Notices | Exemptions | Credit Rating | Actions

Collection Status: Show Active Items Only

Type	Description	Service	Amount	Date	User ID
NT	Pending Disconnect Warning		\$210.14	05/12/2006	
NT	Pending Cut-Off Hang Tag		\$210.14	05/19/2006	

Notes

Using the Collections Tab on the Customer Account Inquiry form users can effectively identify, manage and perform collection actions against delinquent accounts. CIS Infinity allows staff members to quickly target accounts by the amount owing, service or days past the bill due date. Within the collections tab users can issue notices, send letters or schedule phone calls to overdue accounts. Users can also choose to generate field service orders to disconnect or reconnect services from the collections tab.

DEMO V3 - Customer Account Inquiry

Customer: 00178794
Account: 816408066
YENUS WILLIAMS
7 TENNISWORLD AVE
ANYTOWN, 12345

Balance: \$210.14
Deposit: \$0.00
Last Bill: \$210.14 Due 04/20/06
Plan: Variable - Auto Debit
Next: \$210.14 on the 04/20/06

Active Owner
Credit is Excellent (01)
USER'S CONFERENCE/UTILITY
DC06/DC06

Residential
No Tasks to be completed on file

00178794 816408066 05/08/2006 04:17:53

Customer | Service Address | Customer/Account | Services | Addresses | Reading History | Transaction History | Bills | Comments | Move In/Out | PAP

Deposits | Meter Reading | Contact | Equipment | Supplier | Loans/POS | Collections | Map

Collections | Transactions | Disconnect | Agency/Bankruptcy | Arrangements | Notices | Exemptions | Credit Rating | Actions

System: 0 + User: 0 equals Total: 0

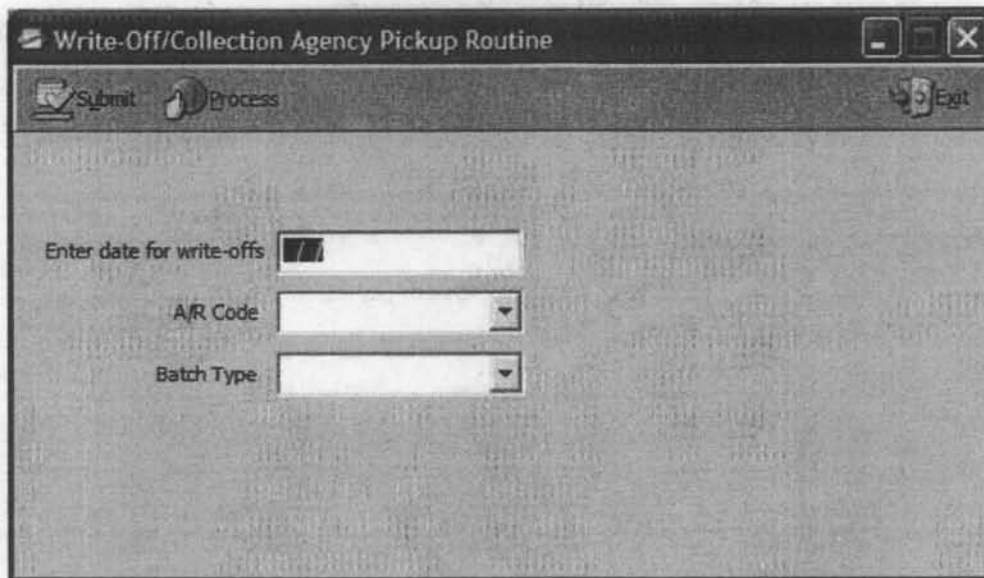
Date	Description	Amount	Credit Points	Account Acquired At	Service Address
------	-------------	--------	---------------	---------------------	-----------------

Credit Ratings

CIS Infinity tracks each individual's credit rating using a credit point system. The credit rating system is easily configured and can be tied to transaction codes such as NSF checks or collection actions such as notices or disconnections. A user can also manually adjust the credit rating if the user feels the customer's credit rating should be increased or decreased.

Automatic Write Offs

Additional features within the collections module include the ability to write-off accounts, add bankruptcies and send overdue accounts to a collections agency for follow-up. Once the parameters for your local business practices have been configured within CIS Infinity, users can automatically write-off accounts using the write-off pick-up routine.



Write-Off/Collection Agency Pickup Routine

Submit Process Exit

Enter date for write-offs

A/R Code

Batch Type

Service Order automation

Managing service orders is a key part of any utilities business. CIS Infinity provides the functionality to make this happen smoothly and effectively. It can initiate work, track work through a pending order process, update orders, and view historical orders; both service and meter based.

More importantly, the service order workflow can be **fully automated** – CIS Infinity can automatically issue a service order in response to a variety of events, including billing exceptions, collections activity, and so on.

Information about service orders related to an account is available for viewing and editing in the Service Orders tab. The user responsible for creating the order is tracked along with the name of the user to whom the order has been assigned.

DEMO V3 - Customer Account Inquiry

00178794 816408066 05/08/2006 04:17:53

Customer: 00178794
Account: 816408066
VENUS WILLIAMS
7 TENNISWORLD AVE
AWYTOWN, 12345

Balance: \$210.14
Deposit: \$0.00
Last Bill: \$210.14 Due 04/20/06
Plan: Variable - Auto Debit
Next: \$210.14 on the 04/20/06

Active Owner
Credit is Excellent (0)
USER'S CONFERENCE/UTILITY
DCD6/DCB06

Residential
No Tasks to be completed on file

Customer | Service Address | Customer/Account | Services | Addresses | Reading History | Transaction History | Bills | Comments | Move In/Out | PAP

Deposits | Meter Reading | Contact | Equipment | Supplier | Loans/POS | Collections | Map

All | Notes | Tasks | Letters | Service Orders | Contacts | Inquiries | Schedule | eMail | Attachments

SO #	Service Order Type	Service Message	Print Date	Completed	Date/Time Closed	Canc
690	Disconnect For Non Pay	Disconnect Electric service	03/30/2006	No	/ /	No

Progress Notes

Completed Notes

☐ Show Completed
☐ Show Cancelled

Also, all service orders can be tracked, organized, and edited using the Service Order Management screen.

DEMO V3 - Service Order Management

Service Order Details | Progress/Completion Notes | Customer/Account Details | Appointment | List

Service Order Type: [Dropdown]

Assigned to: User [Dropdown]

Service Message: [Text Area]

Print Date: / /

Selected Meter(s): [Text Area]

Action: [Dropdown]

Service Order #: [Text Box]

Created By: [Text Box]

Date/Time Created: / / : : AM

Printed By: [Text Box]

Date/Time Printed: / / : : AM

Closed By: [Text Box]

Date/Time Closed: / / : : AM

Service Request #: [Text Box]

Payment Arrangements

CIS Infinity allows payment arrangements to be tracked on an account. Arrangements can be made for a single payment for the overdue amount or for multiple payment arrangements until the total arrears owing is paid off. Users are notified if any payment arrangements are broken so you can take the appropriate action if a customer fails to meet their payment obligations.

Customer Account Arrangements Group

Undo Help Create Group

Date/Time: 05/15/2006 11:50:49

User ID: LKIESEKAMP

A/R Code: [Dropdown]

Date of Arrangement: [Dropdown]

Arrangement Amount: [Text Box]

Paying At: [Dropdown]

Payment method: [Dropdown]

Arrangement Status: None

Actual Payment: [Text Box]

Notes: [Text Area]

Create: [Dropdown] arrangements starting on: [Text Box]

with a payment every: [Text Box]

for a total amount of: \$0.00

or, first arrangement is: \$0.00

divided equally: [Checkbox]

remaining arrangements divided equally: [Checkbox]

Process Group Together in Arrangement Processing: [Checkbox]

Group Status: [Dropdown]

Group Total: \$0.00

Arrangements in Group: [Dropdown]

Difference: \$0.00

Individual Total: \$0.00

Arrangement Date	Arrangement Amount	Status
05/15/2006	\$0.00	None

Exemptions

The Collections module within CIS Infinity allows a user to exempt specific customers from collections actions. Customers can be made exempt from all collection action or be exempt from specific collection actions such as notices, disconnects or penalty charges.

Customer Contact

When customers call you, they expect their Customer Service Representative to have knowledge of all correspondence with that customer. The **Contact** tab is available on the Main Customer Service Form. Not only is there a record of historical transactions, but newsletters, notes, and service orders may be generated and tracked.

DEMO V3 - Customer Account Inquiry

Customer: 00178752 Account: 010407421 DR. NO: 22 DAW: 12345 Balance: \$0.00 Deposit: \$0.00 Last Bill: None Plan: None Next: Active Owner: Credit is Excellent (0) USER'S CONFERENCE/UTILITY DC07/DCB07 Residential Move Out 04/11/06 No Tasks to be completed on file

Customer Service Address Customer/Account Services Addresses Reading History Transaction History Bills Comments Move In/Out PAP

Deposits Meter Reading Contact Equipment Supplier Loans/POS Collections Map

All Notes Tasks Letters Service Orders Contacts Inquiries Schedule eMail Attachments

SO #	Service Order Type	Service Message	Print Date	Completed	Date/Time Closed	Canc
900	Final Bill Service Order		04/11/2006	No		No

Progress Notes Completed Notes

Show Completed Show Cancelled

The comprehensive, integrated Contact Management system in CIS Infinity allows users to assign tasks and automatically generate them for many aspects of their business, creating a tool that supervisors and managers can use to manage workflow. All contact with a customer is available from one tab including notes, tasks, payment arrangements, letters, service orders, notice history, contact history and inquiry history.

CIS Infinity supports and tracks all correspondence. It automatically imports customer information into your word processing program for the creation of individual letters or for the generation of form letters.

The software allows you to identify and track customers independent of the service address. New move-ins, or move-outs can be identified and procedures are in place to then process these accounts. Detailed account summaries and account listings with drill down capabilities are available within the system. Each account may be defined as a member of a special group. These groups may be billed independently.

Service Address Management

CIS Infinity separates the customer account number from the service address number. Combined they represent the complete customer account. Separated they allow information about the service address to be maintained with the building or premises.

With the automated contact management system in CIS Infinity, the move in/move out process is simplified. With the completion of a move in/move out entry on CIS Infinity, the meter reading is automatically scheduled, the necessary service orders are generated and all information for processing deposits and final bills are prepared.

DEMO V3 - Customer Account Inquiry

00176752 816407421 05/08/2006 04:28:26

Customer: 00176752 Balance: \$0.00 Active Owner: Credit is Excellent (0) Residential Move Out: 04/11/06
 Account: 816407421 Deposit: \$0.00 USER'S CONFERENCE/UTILITY No Tasks to be completed on file
 DR NO: 22 DW Plan: None DC07/DCB07

Deposits Meter Reading Contact Equipment Supplier Loans/POS Collections Map

Customer **Service Address** Customer/Account Services Addresses Reading History Transaction History Bills Comments Move In/Out PAP

Address Line 1 Address Line 2

Street # Suffix Prefix Street Name Suffix Apt/Suite/Unit Post Office Box Subdivision

22 DW 12345

Town/City/Village Province/State Postal Code/Zip Code Delivery Point Parcel # Lot #

Parcel ID Old Account #

Direction Instructions Nearest Weather Station

Inspection Order # Internal Map Coordinates

Tax District Internal Map Reference Number

Structure Type GPS Longitude

Structure Size GPS Latitude

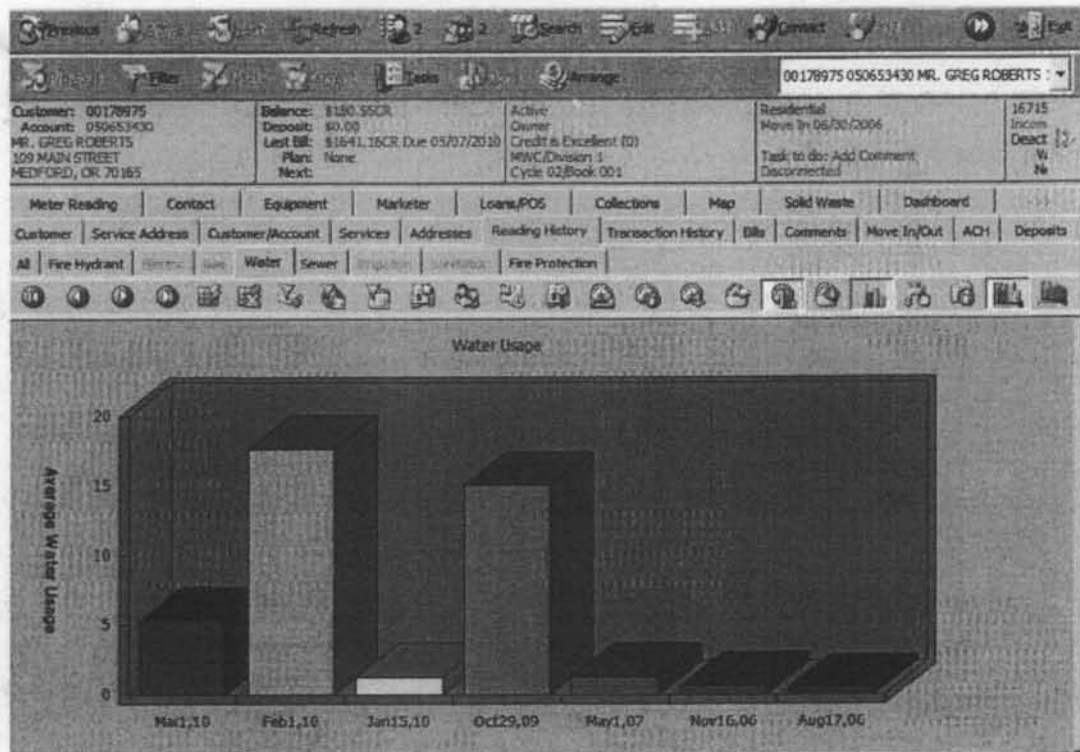
Zone Land Lot Size Property Value \$0.00

Default Auto Move In Customer # Set Auto

Name

Usage Management

CIS Infinity is used to effectively manage usage. At each of these sites an interface has been developed with the meter reading systems including hand-held, automated meter reading systems, and time-of-use systems. CIS Infinity has the ability to capture and track consumption-based usage based on the passage of time as well as measured flow. The system also validates consumption, processes reads and tracks unauthorized use.



Security

Security setup is similar to Microsoft NT security. System administrators create user identifications and users can belong to one or more groups. Objects in CIS Infinity can be restricted by user identification, or by group.

The first level of security in CIS Infinity is the ability to completely configure the user's **menus and items on menus**. If you do not wish to give a user access to a form you can simply not place the form on the user's menu.

System Administrators can pre-define a series of menus that are common, and those menus can be placed on the users menu. Each user's menu does not have to be defined from scratch and could simply have the pre-defined menus on them.

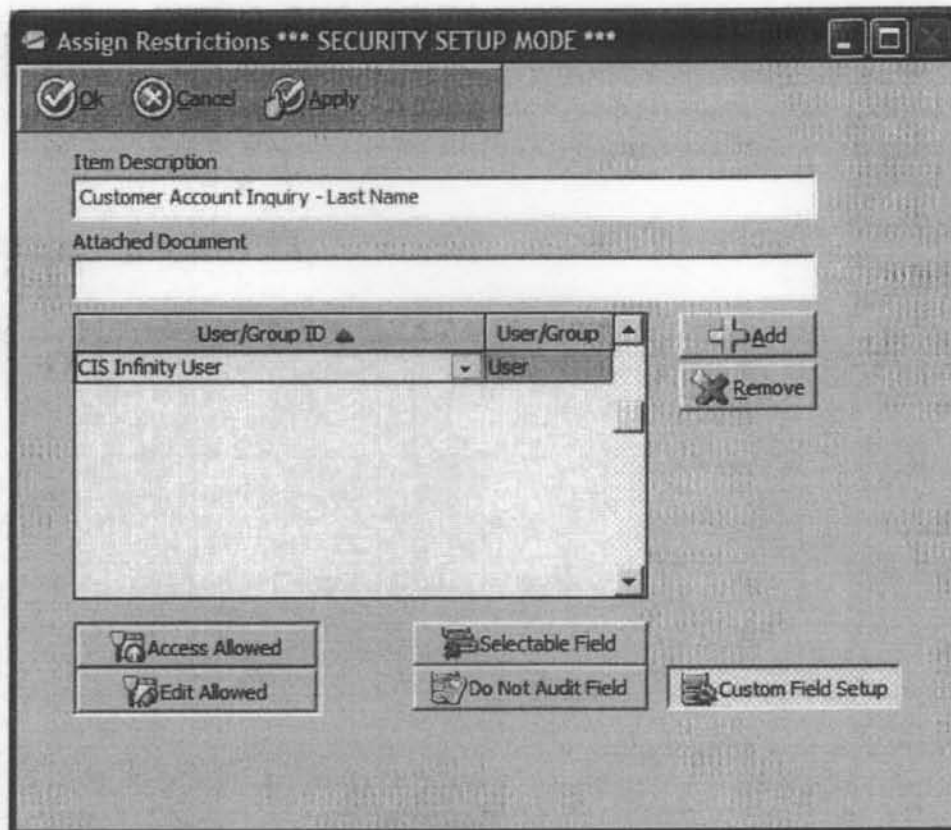
Each item that can be added to the users menu comes with a pre-defined description from Advanced, these descriptions can be customized by the System Administrators to suit your needs and terminology.

Security in CIS Infinity is object based rather than field and table based. This allows system administrators to **secure not only secure fields, but objects such as buttons and pick lists**. You can secure anything you see on the forms of CIS Infinity rather than just restrict users' access to fields or tables. Objects that can be restricted in CIS Infinity Include:

- Fields
- Forms
- Pick lists (entire pick list or selected items in the pick lists)
- Accounts (you can restrict access to particular customers' accounts by user id or by group)
- Batch of Cash (only cashier can use their own batch)
- Billing Batch
- Buttons on forms (restrict users or groups from functions on forms)

Restrictions on objects include read only, visible to user, deletion, addition and more.

Security options differ based on the type of object. For example, entire forms can be made read-only or you can restrict the user to editing current information but they cannot add or delete.



This image illustrates some options for securing a field in CIS Infinity:

- Access Allowed – Choosing this will restricted the user from seeing or editing the field. This can be used to remove fields from the form that you do not utilize as well as restrict access to fields from users who do not need access, for example, Bank Account number.
- Edit Allowed – This will leave the field visible to the user, but restrict editing the value in the field.
- Selectable Field – Since CIS Infinity contains ad hoc query and ad hoc reporting capability, the Selectable field restriction prevents users from being able to use the field in an ad hoc query or ad hoc report.

Auditing

Aside from restrictions, Security also provides the System Administrator access to place auditing on any data field in CIS Infinity. Toggling the Audit/Do Not Audit Field button will enable tracking of the changes, additions and deletions of this field at the middle data access layer of CIS Infinity. Once auditing is placed on a field, end users can also view modifications to these fields

Search

The following outlines the four methods that can be used to query and report on the data contained within CIS Infinity.

Simple Searches

Searching is available from the main customer service form and is the simplest method of querying the database to locate information related to customers. The standard or "canned" methods of searching in the system include the following:

- Address
- Name
- Meter Number
- Phone Number
- Social Security Number
- Driver's License Number
- Taxroll Number
- Bill Number
- Equipment Number
- Payment / Adjustment Amount
- Service Order Number

These simple search options allow a user to search on the field above and use a variable in the field to represent the search criteria. When the search is submitted, the matching accounts are displayed in a browse window displayed below:

Search by Address

Street # Street Name Apt/Suite

☒ Show All Companies
 ☐ Show Balances
 ☒ Show All Statuses

Customer #	Account #	Name	Service Address	Town	Status	Col
00178993	816403081	HELEN SMITH	MAIN ST	ANYTOWN	Active	
00178964	816403091	ANGEL JONES	MAIN ST	ANYTOWN	Active	
00178974	816403115	ABC DEVELOPER	MAIN ST	ANYTOWN	Active	
00178995	816410671	ADVANCED CONSTRUCTION	1 MAIN ST	ANYTOWN	Active	
00006575	020182020	MR. FELIX AJAYI	1 MAIN ST	ANYTOWN	Active	
00178906	816410756	ADVANCED CONSTRUCTION	1 MAIN CIR	ANYTOWN	Incoming	
00178806	816408536	NED TATE	1 MAIN	ANYTOWN	Inactive	
00178841	816408786	PHILIPPE CANTIN	2 MAIN	ANYTOWN	Active	
00178905	816410676	ADVANCED CONSTRUCTION	2 MAIN ST	ANYTOWN	Active	
00178906	816410761	ADVANCED CONSTRUCTION	2 MAIN CIR	ANYTOWN	Incoming	
00178806	816408541	NED TATE	2 MAIN	ANYTOWN	Inactive	
00178841	816408791	PHILIPPE CANTIN	3 MAIN	ANYTOWN	Active	
00178905	816410681	ADVANCED CONSTRUCTION	3 MAIN ST	ANYTOWN	Active	
00178906	816410766	ADVANCED CONSTRUCTION	3 MAIN CIR	ANYTOWN	Incoming	

Based on the search submitted, the information will include specific fields and always includes the following:

- Customer Number
- Account Number
- Name
- Service Address
- City
- Account Status
- Collection Status
- Company
- Division

If a search by meter was initiated, the meter number would also display in the grid.

Alternately, if a search by social security number was initiated, the social security number would be displayed. You will note that there is a Spreadsheet button on the bottom of the form. Once selected, the system will export the data to a spreadsheet in Excel. Our clients use this method of "reporting" to run simple searches and print lists, through the spreadsheet option, for their use.

Advanced Searches

In addition to the "canned" searches, we have incorporated an "Advanced Search" method that allows users to query more than one table of information at a time and place conditions on the searches. This option allows for a more complex query and makes available many

more fields. We have tried to design an intuitive interface for this purpose to make this functionality available to even the most basic user.

This screen is presented to users when the Advanced Search is initiated. The user first chooses a data environment or "table" to search in. The following tables are available to the user in Advanced Search:

- A/R Balance
- Account Service Multipliers
- Account Service Table
- Address Table
- Customer Account Comment Table
- Customer Account Deposit Table
- Customer Account Table