



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item number: 5.b

Title:

Recommendation to Award the Bid for Water, Sanitary Sewer and Storm Sewer Underground Point Repairs

Presenter:

Tim Wilson

Meeting: Government Services Committee

Date: August 28, 2017

Proposed Cost: TBD

Budgeted Amount: \$150,000

Not Budgeted:

Executive Summary *(if not budgeted please explain):*

The City of St. Charles Environmental Services Division is seeking a contractor to perform Water, Sanitary Sewer and Storm Sewer point repairs for the duration of the 2017/2018 fiscal year. A portion of underground point repairs are conducted annually by a construction contractor. Each underground point repair is unique but typically includes hydrant replacement, valve replacement, line repairs, drainage basins and manhole replacements. All work will be contracted on a per unit basis or an hourly rate as identified in the bid.

The City received two bids for point repairs on August 15th. Archon Construction was the lowest unit cost vendor.

The awarded bid was based on the unit cost on typical types of point repairs. Hourly costs were also reviewed to insure the city was selecting the most fiscally responsible vendor. The unit cost and hourly rates for utility and point repairs are reasonably priced in comparison to prior years.

Attachments *(please list):*

* Bid Tabulation * Archon Bid

Recommendation/Suggested Action *(briefly explain):*

Recommendation to award the bid for Water, Sanitary Sewer and Storm Sewer point repairs to Archon Construction for a one year period beginning May 1, 2017 through April 30, 2018.

RETURN WITH BID

SCHEDULE OF UNIT PRICES

Bid Open
8/15/17 @
10:00am



ST. CHARLES
SINCE 1834

Schedule for Unit Prices

For complete information covering these items, see plans and specifications)

			Scorpio Construction	Archon Construction
Item No.	Items	Unit	Unit Price	Unit Price
1	Sidewalk Removal	SF	\$1.00	\$6.25
2	Pavement Removal, Special	SY	\$6.00	\$10.35
3	Curb Removal and Replacement	LF	\$6.00	\$25.95
4	Portland Cement Concrete Driveway Removal	SY	\$10.00	\$7.40
5	Hot-Mix Asphalt Driveway Removal	SY	\$4.00	\$7.40
6	Remove Valve Box & Replace with 4' Dia. Valve Vault	EACH	\$7,500.00	\$3,139.00
7	Remove Valve Box & Replace with 6' Dia. Valve Vault	EACH	\$10,000.00	\$3,025.00
8	Rebuild Top of Structure	EACH	\$1,500.00	\$1,244.00
9	Rebuild Top of Structure - New Frame and Grate	EACH	\$1,500.00	\$1,518.00
10	Fire Hydrant Assembly - Remove & Replace	EACH	\$6,500.00	\$5,063.00
11	Valve Boxes to be Adjusted - With Stabilizer	EACH	\$1,500.00	\$664.00
12	Remove and Replace Valve Box - With Stabilizer	EACH	\$1,500.00	\$759.00
13	1" Copper Water Service With B-Box Connection	LF	\$45.00	\$214.00
14	Remove and Replace B-Box	EACH	\$1,000.00	\$726.00
15	New 48" Sanitary Manhole to 10' in Depth	EACH	\$10,000.00	\$3,802.00
16	New 48" Sanitary Manhole from 11' to 20' in Depth	EACH	\$28,000.00	\$7,832.00
17	Remove and Replace 48" Dia. Sanitary Manhole to 10' Depth	EACH	\$15,000.00	\$5,646.00
18	Remove and Replace 48" Dia. Sanitary Drop Manhole to 10' Depth	EACH	\$18,000.00	\$7,605.00
19	Remove and Replace 48" Dia. Sanitary Manhole from 11' to 20' Depth	EACH	\$35,000.00	\$7,832.00
20	Remove and Replace 48" Dia. Sanitary Drop Manhole from 11' to 20' Depth	EACH	\$38,000.00	\$7,832.00
21	Remove and Replace 6" Sanitary Sewer Service	LF	\$40.00	\$217.00
22	Sanitary Manhole Chimney Seal	EACH	\$800.00	\$1,315.00
23	Remove & Replace 2' Dia. Catch Basin	EACH	\$3,200.00	\$2,552.00
24	Remove & Replace 4' Dia. Catch Basin	EACH	\$6,500.00	\$3,992.00
25	New 2' Dia. Catch Basin	EACH	\$2,800.00	\$2,091.00
26	New 4' Dia. Catch Basin	EACH	\$5,800.00	\$3,531.00
27	Remove & Replace 4' Dia. Water Valve Manhole	EACH	\$7,000.00	\$4,254.00
28	Remove & Replace 5' Dia. Water Valve Manhole	EACH	\$9,000.00	\$4,254.00
29	Storm Sewer Manhole, Type A, 5'-Diameter	EACH	\$9,000.00	\$3,802.00
30	Adjust Frame in Parkway or Sidewalk	EACH	\$600.00	\$804.00
31	Adjust Frame in Pavement	EACH	\$1,100.00	\$1,609.00
32	Adjust Frame in Pavement - New Frame and Lid	EACH	\$1,400.00	\$804.00
33	Adjust Frame in Parkway - New Frame and Lid	EACH	\$600.00	\$1,609.00
34	Adjust Frame in Curb	EACH	\$1,100.00	\$1,609.00
35	Adjust Frame in Curb - New Frame and Grate	EACH	\$1,100.00	\$1,609.00
36	Sanitary Sewer Pipe, Remove 6" VCP Pipe & Replace with 6" PVC, SDR 26	LF	\$40.00	\$156.00
37	Sanitary Sewer Pipe, Remove 8" VCP Pipe & Replace with 8" PVC, SDR 26	LF	\$60.00	\$156.00
38	Sanitary Sewer Pipe, Remove 10" VCP Pipe & Replace with 10" PVC, SDR 26	LF	\$70.00	\$156.00
39	Sanitary Sewer Pipe, Remove 12" VCP Pipe & Replace with 12" PVC, SDR 26	LF	\$80.00	\$156.00
40	Storm Sewer Pipe Removal and Replacement, 10" RCP, CL IV	LF	\$50.00	\$152.00
41	Storm Sewer Pipe Removal and Replacement, 12" RCP, CL IV	LF	\$60.00	\$152.00
42	Storm Sewer Pipe Removal and Replacement, 15" RCP, CL IV	LF	\$65.00	\$152.00
43	Storm Sewer Pipe Removal and Replacement, 18" RCP, CL IV	LF	\$70.00	\$152.00
44	Storm Sewer Pipe Removal and Replacement, 21" RCP, CL IV	LF	\$80.00	\$152.00
45	Temporary Access, Special	SY	\$30.00	\$11.00

RETURN WITH BID



SCHEDULE OF HOURLY PRICES

**Bid Open
8/15/17 @
10:00am**

Schedule for Hourly Rates

(For complete information covering these items, see plans and specifications)

Item No.	Items	Unit	Scorpio Construction		Archon Construction	
			MAU Rate		MAU Rate	
			ST	OT	ST	OT
46	Project Manager	hr	140	210	122	122
47	Site Superintendent	hr	150	225	144	189
48	Office Administration	hr	60	90	60	60
49	Union Operator	hr	150	225	144	189
50	Union Labor	hr	140	210	122	159
51	Excavator 5000 to 9000	hr	40	40	24	24
52	Excavator 10000 to 12000	hr	45	45	26	26
53	Excavator 13000 to 22000	hr	60	60	30	30
54	Excavator 23000 to 34000	hr	180	180	87	87
55	Excavator 35000 to 54000	hr	210	210	140	140
56	Excavator 55000 to 76000	hr	240	240	198	198
57	Excavator 5000 to 9000 w/ Hammer	hr	120	120	51	51
58	Excavator 10000 to 12000 w/ Hammer	hr	150	150	54	54
59	Excavator 13000 to 22000 w/ Hammer	hr	180	180	58	58
60	Excavator 23000 to 34000 W/ Hammer	hr	210	210	167	167
61	Excavator 35000 to 54000 W/ Hammer	hr	240	240	220	220
62	Excavator 55000 to 76000 w/ Hammer	hr	350	350	337	337
63	Skid Steer < 2000 Lb	hr	35	35	43	43
64	Skid Steer 2000 to 4000	hr	35	35	46	46
65	Skid Steer < 2000 Lb w/Hyd Power Accessories	hr	100	100	71	71
66	Skid Steer 2000 to 4000 w/Hyd Power Accessories	hr	120	120	126	126
67	Wheel Loader 9000 to 15000	hr	50	50	34	34
68	Wheel Loader 16000 to 21000	hr	60	60	47	47
69	Wheel Loader 22000 to 32000	hr	70	70	76	76
70	Backhoe Loader 20000 to 30000	hr	60	60	88	88
71	Backhoe Loader 20000 to 30000 w/ Hammer	hr	180	180	116	116
72	Truck 150 or equal	hr	50	50	31	31
73	Truck 250 or equal	hr	60	60	31	31
74	Truck 350 or equal	hr	65	65	46	46
75	Truck 450 or equal	hr	-	-	46	46
76	Truck 550 or equal	hr	-	-	58	58
77	Truck 650 or equal	hr	-	-	58	58
78	Tandem Tractor	hr	-	-	68	68
79	Tandem Dump Truck	hr	100	100	83	83
80	10 Ton Tag	hr	146	170	8	8
81	20 Ton Tag	hr	170	200	11	11
82	35 Ton Lowboy (2axle)	hr	200	220	22	22
83	50 Ton Lowboy (3 axle)	hr	220	250	27	27
84	Dump Trailer (Semi)	hr	130	160	120	120
85	Vacuum Excavator Trailer Mounted	hr	250	360	22	22
86	Air Compressors < 200 CFM	hr	50	50	15	15
87	Gas saw hand	hr	30	30	7	7
88	Gas saw walk	hr	40	40	9	9
89	Jack Hammer < 80#	hr	30	30	27	27
90	Plate compactor	hr	30	30	4	4
91	Chainsaw	hr	30	30	8	8
92	Oxygen/ Acetylene Cutting Torch	hr	70	70	28	28
93	Water Pump up to 2"	hr	30	30	9	9
94	Water Pump 3"	hr	40	40	10	10
95	Water Pump 4"	hr	80	80	20	20
96	Generator up to 15000 watt	hr	70	70	24	24



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(For complete information covering these items, see plans and specifications)

Item No.	Items	Unit	Scorpio Construction		Archon Construction	
			MAU Rate		MAU Rate	
			ST	OT	ST	OT
97	Light Tower 6000 watt	hr	50	50	18	18
98	Directional Drills up to 10000 lbs	hr	170	170	86	86
99	Directional Drills 10000 to 20000 lbs	hr	220	220	99	99
100	Directional Drills 21000 to 30000 lbs	hr	250	250	115	115
101	Directional Drills 31000 to 40000 lbs	hr	400	400	131	131
102	Aluminum Shore Box or equal up to 15 x 15	day	800	800	112	112
103	Hardwood Mat	day	1000	1000	66	66
104	Steel Road Plate	day	100	100	24	24

**Legal Notice
Invitation for Bid**

Sealed bids will be received by the City of St. Charles at the Office of the Purchasing Manager, Two East Main Street, St. Charles, Illinois 60174 no later than 10:00 a.m. on Tuesday, August 15, 2017, for the **2017/2018 Underground Point Repairs**. All bids will be opened publicly and read aloud in the Council Chambers located at Two East Main Street, St. Charles, IL 60174, at 10:00 a.m. on Tuesday, August 15, 2017.

Bidders are advised of the following requirements of this contract: 1) Certificate of Insurance meeting the City's requirements.

Bid Documents and Proposal forms may be obtained at the City of St. Charles website at, <http://www.stcharlesil.gov/bids-proposals>. Addenda will be available to document holders via the website. It is the responsibility of the contractor to frequently check the City's website for any future addendums. All questions shall be directed to Tim Wilson, Public Works Manager, at twilson@stcharlesil.gov.

All sealed envelopes must be clearly marked for which proposal they pertain to.

The City expressly reserves the right to reject any or all bids or to accept the one that appears to be in the best interest of the City. The City expressly reserves the right to waive any informalities, discrepancies or technical irregularities in a bid if to do so is in the best interest of the City.

The City of St. Charles does not discriminate in admission, access to, treatment, or employment in its programs and activities.

RETURN WITH BID



SCHEDULE OF UNIT PRICES

Schedule for Unit Prices

(For complete information covering these items, see plans and specifications)

Item No.	Items	Unit	Unit Price
1	Sidewalk Removal	SF	6.25
2	Pavement Removal, Special	SY	10.35
3	Curb Removal and Replacement	LF	25.95
4	Portland Cement Concrete Driveway Removal	SY	7.40
5	Hot-Mix Asphalt Driveway Removal	SY	7.40
6	Remove Valve Box & Replace with 4' Dia. Valve Vault	EACH	3139.-
7	Remove Valve Box & Replace with 6' Dia. Valve Vault	EACH	3025.-
8	Rebuild Top of Structure	EACH	1244.-
9	Rebuild Top of Structure - New Frame and Grate	EACH	1518.-
10	Fire Hydrant Assembly - Remove & Replace	EACH	5063.-
11	Valve Boxes to be Adjusted - With Stabilizer	EACH	664.-
12	Remove and Replace Valve Box - With Stabilizer	EACH	759.-
13	1" Copper Water Service With B-Box Connection	LF	214.-
14	Remove and Replace B-Box	EACH	726.-
15	New 48" Sanitary Manhole to 10' in Depth	EACH	3802.-
16	New 48" Sanitary Manhole from 11' to 20' in Depth	EACH	7832.-
17	Remove and Replace 48" Dia. Sanitary Manhole to 10' Depth	EACH	5646.-
18	Remove and Replace 48" Dia. Sanitary Drop Manhole to 10' Depth	EACH	7605.-
19	Remove and Replace 48" Dia. Sanitary Manhole from 11' to 20' Depth	EACH	7832.-
20	Remove and Replace 48" Dia. Sanitary Drop Manhole from 11' to 20' Depth	EACH	7832.-
21	Remove and Replace 6" Sanitary Sewer Service	LF	217.-
22	Sanitary Manhole Chimney Seal	EACH	1315.-
23	Remove & Replace 2' Dia. Catch Basin	EACH	2552.-
24	Remove & Replace 4' Dia. Catch Basin	EACH	3992.-
25	New 2' Dia. Catch Basin	EACH	2091.-
26	New 4' Dia. Catch Basin	EACH	3531.-
27	Remove & Replace 4' Dia. Water Valve Manhole	EACH	4254.-
28	Remove & Replace 5' Dia. Water Valve Manhole	EACH	4254.-
29	Storm Sewer Manhole, Type A, 5'-Diameter	EACH	3802.-
30	Adjust Frame in Parkway or Sidewalk	EACH	804.-
31	Adjust Frame in Pavement	EACH	1609.-
32	Adjust Frame in Pavement - New Frame and Lid	EACH	804.-
33	Adjust Frame in Parkway - New Frame and Lid	EACH	1609.-
34	Adjust Frame in Curb	EACH	1609.-
35	Adjust Frame in Curb - New Frame and Grate	EACH	1609.-
36	Sanitary Sewer Pipe, Remove 6" VCP Pipe & Replace with 6" PVC, SDR 26	LF	156.-
37	Sanitary Sewer Pipe, Remove 8" VCP Pipe & Replace with 8" PVC, SDR 26	LF	156.-
38	Sanitary Sewer Pipe, Remove 10" VCP Pipe & Replace with 10" PVC, SDR 26	LF	156.-
39	Sanitary Sewer Pipe, Remove 12" VCP Pipe & Replace with 12" PVC, SDR 26	LF	156.-
40	Storm Sewer Pipe Removal and Replacement, 10" RCP, CL IV	LF	152.-
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42	Storm Sewer Pipe Removal and Replacement, 15" RCP, CL IV	LF	152.-
43	Storm Sewer Pipe Removal and Replacement, 18" RCP, CL IV	LF	152.-
44	Storm Sewer Pipe Removal and Replacement, 21" RCP, CL IV	LF	152.-
45	Temporary Access, Special	SY	11.-

RETURN WITH BID

SCHEDULE OF HOURLY PRICES



Schedule for Hourly Rates
(For complete information covering these items, see plans and specifications)

Item No.	Items	Unit	MAU Rate	
			ST	OT
46 ✓	Project Manager	hr	122.-	122.-
47 ✓	Site Superintendent	hr	144.-	189.-
48 ✓	Office Administration	hr	60.-	60.-
49 ✓	Union Operator	hr	144.-	189.-
50 ✓	Union Labor	hr	122.-	159.-
51 ✓	Excavator 5000 to 9000	hr	24.-	24.-
52 ✓	Excavator 10000 to 12000	hr	26.-	26.-
53 ✓	Excavator 13000 to 22000	hr	30.-	30.-
54 ✓	Excavator 23000 to 34000	hr	82.-	82.-
55 ✓	Excavator 35000 to 54000	hr	140.-	140.-
56 ✓	Excavator 55000 to 76000	hr	198.-	198.-
57 ✓	Excavator 5000 to 9000 w/ Hammer	hr	57.-	57.-
58 ✓	Excavator 10000 to 12000 w/ Hammer	hr	54.-	54.-
59 ✓	Excavator 13000 to 22000 w/ Hammer	hr	58.-	58.-
60 ✓	Excavator 23000 to 34000 W/ Hammer	hr	167.-	167.-
61 ✓	Excavator 35000 to 54000 W/ Hammer	hr	220.-	220.-
62 ✓	Excavator 55000 to 76000 w/ Hammer	hr	337.-	337.-
63	Skid Steer < 2000 Lb	hr	43.-	43.-
64 ✓	Skid Steer 2000 to 4000	hr	46.-	46.-
65 ✓	Skid Steer < 2000 Lb w/Hyd Power Accessories	hr	71.-	71.-
66 ✓	Skid Steer 2000 to 4000 w/Hyd Power Accessories	hr	126.-	126.-
67 ✓	Wheel Loader 9000 to 15000	hr	34.-	34.-
68 ✓	Wheel Loader 16000 to 21000	hr	47.-	47.-
69 ✓	Wheel Loader 22000 to 32000	hr	76.-	76.-
70 ✓	Backhoe Loader 20000 to 30000	hr	88.-	88.-
71 ✓	Backhoe Loader 20000 to 30000 w/ Hammer	hr	116.-	116.-
72 ✓	Truck 150 or equal	hr	31.-	31.-
73 ✓	Truck 250 or equal	hr	31.-	31.-
74 ✓	Truck 350 or equal	hr	46.-	46.-
75 ✓	Truck 450 or equal	hr	46.-	46.-
76 ✓	Truck 550 or equal	hr	58.-	58.-
77 ✓	Truck 650 or equal	hr	58.-	58.-
78 ✓	Tandem Tractor	hr	68.-	68.-
79 ✓	Tandem Dump Truck	hr	83.-	83.-
80 ✓	10 Ton Tag	hr	8.-	8.-
81	20 Ton Tag	hr	11.-	11.-
82 ✓	35 Ton Lowboy (2axle)	hr	22.-	22.-
83 ✓	50 Ton Lowboy (3 axle)	hr	27.-	27.-
84 ✓	Dump Trailer (Semi)	hr	120.-	120.-
85 ✓	Vacuum Excavator Trailer Mounted	hr	22.-	22.-
86 ✓	Air Compressors < 200 CFM	hr	15.-	15.-
87 ✓	Gas saw hand	hr	7.-	7.-
88 ✓	Gas saw walk	hr	9.-	9.-
89 ✓	Jack Hammer < 80#	hr	27.-	27.-
90 ✓	Plate compactor	hr	4.-	4.-
91 ✓	Chainsaw	hr	8.-	8.-
92 ✓	Oxygen/ Acetylene Cutting Torch	hr	28.-	28.-
93 ✓	Water Pump up to 2"	hr	9.-	9.-
94 ✓	Water Pump 3"	hr	10.-	10.-
95 ✓	Water Pump 4"	hr	20.-	20.-

RETURN WITH BID

96	Generator up to 15000 watt	hr	24.-	24.-
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Page 28

SCHEDULE OF HOURLY PRICES



ST. CHARLES
SINCE 1814

Schedule for Hourly Rates

(For complete information covering these items, see plans and specifications)

Item No.	Items	Unit	MAU Rate	
			ST	OT
97	Light Tower 6000 watt	hr	18.-	18.-
98	Directional Drills up to 10000 lbs	hr	86.-	86.-
99	Directional Drills 10000 to 20000 lbs	hr	99.-	99.-
100	Directional Drills 21000 to 30000 lbs	hr	115.-	115.-
101	Directional Drills 31000 to 40000 lbs	hr	131.-	131.-
102	Aluminum Shore Box or equal up to 15 x 15	day	112.-	112.-
103	Hardwood Mat	day	66.-	66.-
104	Steel Road Plate	day	24.-	24.-

TABLE OF CONTENTS

SECTION ONE – GENERAL PROVISIONS

Location of Project.....3
Description of Project3
Construction Schedule and Completion Date3
Notification of Work3
City Supplied Materials / Contractor Materials4
Construction Operations4
Sequence of Operations5
Approval of Subcontractors6
Daily Project Scheduling6
Punch List Items.....6
Contractor Payouts – Required Submittals.....6
Wage Rates6
Clean Construction or Demolition Debris (CCDD).....6
Pre-Construction Video Taping.....6
Cleaning.....7
Utility Locations.....7
Material Certification.....8
Property Owner Notification.....8
Protection of Trees and Shrubs.....8
Protection of Existing Drainage Facilities During Construction.....9
Use of Fire Hydrants.....9
Construction Stakes, Lines and Grades.....9
Sawing Pavement, Driveway Pavement, Sidewalk and Curb.....9
Concrete Breakers.....10
Limits of Removal.....10
Aggregate for Temporary Access.....10
Backfilling of Structures.....10
Trench Backfill Requirements.....10
Final Adjustment of Frame & Cover.....11
Restoration.....11

Temporary Patch.....11

SECTION TWO – PAY ITEM PROVISIONS

Opening to Traffic12

Quality Control/ Quality Assurance (QC/QA)12

Sidewalk Removal.....12

Pavement Removal, Special.....13

Curb Removal and Subbase Replacement.....13

Portland Cement Concrete Driveway Removal and Replacement.....14

Hot-Mix Asphalt Driveway Removal and Replacement.....15

Remove Valve Box & Replace with 4’ Dia. Valve Vault.....15

Remove Valve Box & Replace with 6’ Dia. Valve Vault.....16

Rebuild Top of Structure / Rebuild Top of Structure – New Frame and Grate.....16

Fire Hydrant Assembly – Remove & Replace.....17

Valve Boxes to be adjusted – With Stabilizer / Remove and Replace Valve
Box – With Stabilizer.....17

1” Copper Water Service with B-Box & Connection to Existing / 1” Copper
Water Service with B-box18

Remove & Replace B-Box18

New 48” Dia. Sanitary Manhole to 10’ in Depth18

New 48” Dia. Sanitary Manhole to 11 to 20’ in Depth19

Remove & Replace 48” Dia. Sanitary Manhole or 48” Dia. Sanitary
Drop Manhole to 10’ in Depth.....19

Remove & Replace 48” Dia. Sanitary Manhole or 48” Dia. Sanitary
Drop Manhole to 11’ to 20’ in Depth20

Remove and Replace, Sanitary Sewer Service 6”.....20

Sanitary Manhole Chimney Seal.....21

Remove & Replace Catch Basin; New Catch Basin21

Remove & Replace 4’ Dia. Water Valve Manhole; Remove & Replace
5’ Dia. Water Valve Manhole22

Manhole, 5’ – Diameter, Closed Lid22

Adjust Frame or Adjust Frame – New Frame & Lid (In Pavement, Curb,
Sidewalk or Parkway).....23

Storm Sewer Removal & Replacement / Sanitary Sewer Pipe, Removal
& Replacement.....23

Temporary Access, Special24

SECTION THREE– PAY ITEM HOURLY RATES, AWARD, PRICING SCHEDULES

Part III Schedule for Hourly Rate25

Additional Clarification – Award Criteria25

Schedule for Unit Prices26

Schedule for Hourly Rates27 - 28

CITY OF ST CHARLES
Water, Sanitary Sewer and Storm Sewer Point Repairs.

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction” adopted April 1, 2016, and the Supplemental Specifications adopted April 1, 2016 (hereafter referred to as the Standard Specifications); the “Manual on Uniform Traffic Control Devices for Streets and Highways” in effect on the date of invitation for bids; the “Supplemental Specifications and Recurring Special Provisions”; adopted January 1, 2017; and the “Standard Specifications for Water and Sewer Construction in Illinois”, 7th Edition. In case of conflict with any parts of said specifications, the said Special Provisions shall take precedence and shall govern.

SECTION ONE – GENERAL SPECIAL PROVISIONS

LOCATION OF PROJECT

The proposed project is located at a variety of locations within the City limits. Contractor will be assigned work orders throughout the fiscal year of May 1, 2017 –April 30, 2018. Based on previous workloads, the City anticipates up to \$150,000 of work to be needed this fiscal year. There is no minimum guarantee of work with this contract. All work will be dictated at the discretion of the Public Works Manager(s) by need and budgetary funds available.

DESCRIPTION OF PROJECT

The proposed project may consist of hot-mix asphalt pavement removal, curb and gutter removal, driveway pavement removal, sidewalk removal, repair of underground infrastructure, and adjustment of utility and drainage structures. All other incidental and collateral work necessary to complete the project as described herein will be the responsibility of the Contractor. Pavement, Curb, Sidewalk and landscaping restoration may be completed by others at the City’s discretion.

CONSTRUCTION SCHEDULE AND COMPLETION DATES

Construction is scheduled to begin as outlined below, and only after the proper execution of the contact documents, which includes the submission of insurance or within two weeks of notice to proceed.

Each job will be assigned to the contractor via work order.

NOTIFICATION OF WORK

The Contractor shall notify the City of St. Charles Staff prior to commencement of all items of work. Each job should include a preconstruction onsite meeting; the Contractor shall meet with the City staff and present, in writing, a detailed construction schedule, a detailed list of city materials requested. Said schedule shall contain such information as the City staff deems necessary, including sequencing of streets and dates for the starting and completing construction operations, location of off-site disposal areas, access routes to be used and location of equipment and material storage sites. Once approved, the Contractor must adhere to the schedule so that field markings of all items of work may proceed in advance of actual construction.

The Contractor shall confirm with the City Staff the scheduled commencement of each construction activity **at least five days in advance** to allow for proper notification of residents and motorists. The principle activities requiring public notification are commencement utility repairs, curb and driveway removal.

CITY SUPPLIED MATERIALS / CONTRACTOR MATERIALS

The City will supply the following materials:

- Fire Hydrant with Alx. Valve and all MJ Fittings
- Valve with all MJ fittings
- Water Main Ductile Iron Pipe
- Water Main PVC Pipe
- All Water Service Line Fittings
- All Water Main Fittings
- Non-Shear Sewer couplings
- Sanitary Sewer PVC Pipe
- Storm Sewer PVC Pipe
- Manhole Structures
- Inlet Structures
- Frame and lid
- Drainage grates
- Adjustment Rings
- SDR 26 Fittings
- Brick & Mortar
- Mastic or Easy Stick
- UPM – Cold Patch (as needed)
- Manhole Steps
- Course aggregate CA-7, CA-6
- Black Dirt

Any other material required by the contractor to complete the work per City standards will be the responsibility of the contractor to supply. Unit prices submitted by the Contractor shall include in all labor, equipment, materials and incidentals necessary to complete the work as described below.

The Contractor shall not deliver and store any material or equipment on the project site more than one day (24 hours) in advance before commencing work. If advanced staging is required, the Contractor shall notify the City to request that materials or equipment to be staged at a City facility. Only non-paved portion of the street may be used for any material storage. Any required pavement repair and parkway restoration (sod), due to the damage because of materials storage, shall be borne by the Contractor.

CONSTRUCTION OPERATIONS

In order to minimize the effect of construction noise during the improvement, the Contractor and his subcontractors shall comply with the following requirements. Any changes to the schedule will not be accepted unless approved by the City Staff.

- All engines and engine driven equipment used for hauling or construction shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive unusual noises. Any machine or device or part thereof which is regulated by or becomes regulated by Federal or State of Illinois noise standards shall conform to those standards.
- Except where noted in the construction schedule, construction operations, including the startup of heavy equipment shall not begin before 7:00 AM Monday through Friday. Construction operations including site cleanup, shall be completed before 7:00 PM Monday through Friday. Unless otherwise authorized by the City, no work of any kind, shall be done on Saturdays, Sundays or holidays observed in Illinois. These time restrictions shall not apply to maintenance or operation of safety and traffic control devices such as barricades, signs and/or lighting, or construction of an emergency nature. If the Contractor requires additional time to complete a portion of the work on any given day or if he foresees the need to work extended hours for a number of days to comply with the construction schedule, he must receive approval of the City Staff.
- The Contractor shall schedule and conduct his operations so that the closure time of an existing driveway along the route of improvements is kept to a minimum. All business owners shall be given a minimum 48-hour notice prior to initial removal of their driveway apron, limiting removal of aprons and loading docks to ½ at a time, unless otherwise directed by the City Staff. The Contractor shall make every effort to keep driveways open including temporary grading and placement of aggregate.
- Under no circumstances shall a resident be displaced from their driveway access overnight.
- No excavations shall be left open overnight.
- Beginning on the date that the Contractor commences work on the project, he/she shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvements. Normal maintenance shall include all repair work deemed necessary by the City Staff. The work involved in maintaining the existing pavement shall be included in the cost of MOBILIZATION.

SEQUENCE OF OPERATIONS

The Contractor shall coordinate work in a manner that will cause as little inconvenience to traffic as possible. The Contractor shall work closely with City Officials, Fire and Police Departments in coordinating interruption to normal traffic and parking facilities, access to homes and businesses, and inconveniences to the public.

The proposed work sequence follows:

- a. Construction staking and identification of utility repair locations (**Mandatory by Contractor prior to commencement of contract work**).

- b. Coordinate with City staff regarding City-provided materials needed and construction schedule.
- c. Rehabilitation/replacement of the existing storm, water, and sanitary utilities will be performed by the Contractor.
- d. Obtain Public Work's acceptance of all utility structure adjustments, rebuilds and concrete collars. Contractor to provide laborer to remove F/C's for inspections. All structures shall be cleaned as required prior to final inspection.
- e. Clean streets, side walk and job as required.
- f. Remove all remaining traffic control protection and public notification appurtenances.

APPROVAL OF SUBCONTRACTORS

The Contractor shall provide a list of the intended source of materials and the intended Subcontractor to be used for the project. The City of St Charles shall approve all subcontractors to be used on the project and reserves the right to reject the use of any subcontractor due to past performance or the apparent inability to perform the item of the work required of him.

DAILY PROJECT SCHEDULING

Except in emergency or time-sensitive instances, the City shall schedule at least one full day of work for the Contractor. Once work has commenced, the Contractor shall telephone City Staff every morning to provide daily and weekly progress and schedules.

PUNCH LIST ITEMS

Throughout the duration of the project, Staff may submit periodic punch list items to the Contractor. **The City Public Works Division(s) will do utility inspections of work performed on public utilities. These inspections performed by Public Works Staff must be performed prior to installation of backfill.** Punch list items will be assessed within five days of job completion if these items are not complete to the satisfaction of the Staff, final payment will with held..

CONTRACTOR PAYOUTS – REQUIRED SUBMITTALS

Contractor payout requests can be submitted at any time, and do not have to go through a scheduled City Council Meeting to authorize payment; as long as the Contract amount is not exceeded. Change Orders, which would cause the Contract to go above Original Contract Amount, will go through scheduled Committee and Council Meetings for approval.

Submittals required for **any** Contractor payouts, which must be received prior to release of payout, are listed below:

1. Lien Waivers from General Contractor and any Subcontractors or Vendor receiving payments from subject payout.
2. Copies of Certified Payroll for period when work was completed.
3. Sworn Statement from General Contractor.

WAGE RATES

Kane County Prevailing Wages shall be used for all work under the contract.

CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD)

The Contractor will be allowed to dispose all CCDD materials at the City yard. All spoils shall be separated between concrete, asphalt and dirt, and separated in the appropriate bin. All spoils shall be free of garbage. The Contractor shall be provided with and be responsible for completing a spoils sheet. This sheet will document quantities of spoils removed from each work site as well as the quantities and types of materials returned to the site. Coordination will be executed by the City's staff and provided to the contractor at the pre-construction meeting.

CLEANING

The Contractor and his subcontractors by the end of the working day shall remove from the premises rubbish, waste material and accumulations and shall keep the premises clean. **The Contractor shall keep the premises clean during construction to the satisfaction of the Staff. This work shall be included in the unit cost of specified work.**

UTILITY LOCATIONS

The Contractor must exercise extreme caution while working around existing utilities. The Contractor shall notify JULIE (1-800-892-0123), a minimum of 48 hours commencing construction for utility locations within the scope of the project. It is the responsibility of the Contractor to contact agencies who may or may not be part of the JULIE system to obtain the horizontal and vertical field locations of their facilities within the limits of the work.

MATERIAL CERTIFICATION

The City will supply the materials noted above to be used in the course of this work. Any materials supplied by the Contractor will need to be inspected and accepted by City staff, and the results thereof must comply with the requirements of the Standard Specifications and/or the Special Provisions.

PROPERTY OWNER NOTIFICATION

Where applicable, City Staff will be responsible for delivery of notification letters to all property owners affected by each Phase at least 24 hours, but not more than 72 hours, prior to commencement of work.

The Contractor shall be responsible for posting suitable advance notice with City staff 48 hours, prior to commencement of work. Any time a driveway may be impacted, the contractor shall attempt to notify the resident in person prior to excavation of any kind. This work shall be included in the unit cost.

PROTECTION OF TREES AND SHRUBS

All trees shall be protected and cared for during the construction in accordance with the applicable Articles of Section 201 of the Standard Specifications and this Special Provision, with the following revisions. The Contractor shall prune all tree roots along the side of the proposed improvement, prior to digging, in the presence of the City Arborist. All costs for root pruning shall be paid for by the Contractor and shall be included in the unit cost. No additional compensation will be allowed for root pruning fees.

Every effort should be made by the Contractor when working near trees and shrubs to preserve same from harm. No trees or shrubs shall be removed unless authorized in the field by the City Arborist. Tree removal shall be coordinated by the City at the Arborist's discretion independent of this contract.

Damages at the rate of two hundred dollars (\$200.00) per inch of trunk diameter shall be charged against the Contractor for unauthorized removal or destruction of any tree. The protection and care of trees and shrubs as herein specified will be included in the cost of MOBILIZATION.

PROTECTION OF EXISTING DRAINAGE FACILITIES DURING CONSTRUCTION

Unless otherwise noted in the Contract Documents, the existing drainage facilities shall remain in use during the period of construction. Prior to commencing work, the Contractor, at his own expense shall determine the exact locations of existing structures that are within the proposed construction limits.

Unless reconstruction or adjustment of an existing manhole, catch basin, inlet or adjustment to the frame and grate is called for in the Contract Documents or ordered by the City, the proposed work shall meet the existing elevation of these structures.

The Contractor shall take the necessary precautions when working near or above existing sewers to protect these sewers from any damage resulting from his operations. All work and material necessary to repair any existing sewers damaged due to non-compliance with this provision shall be provided, as directed by the City staff, in accordance with Section 550 of the Standard Specifications, at the Contractor's expense with no extra compensation being allowed.

It shall be the Contractor's responsibility to direct the work and protect the facilities from damage during all construction activities.

USE OF FIRE HYDRANTS

Contractor may utilize water from a metered City facility. The Contractor shall contact the City of St Charles Water Division to obtain a water meter and for permission to use water from existing fire hydrants. A meter deposit will be required at the time of checkout. The Water Division reserves the right to restrict which fire hydrant(s) may be used. The Contractor shall use special care in opening and closing of fire hydrants following Water Division guidelines. Repairs caused by failure to comply with proper operating guidelines will result in the sole responsibility of the Contractor.

SAWING PAVEMENT, DRIVEWAY PAVEMENT, SIDEWALK, AND CURB

This work shall be performed at locations stated in the Contract Documents or as directed by the City Staff.

The Contractor shall cut the joint between the portion of pavement, driveway, sidewalk and/or curb to be removed and that to be left in place with a sawing machine to prevent spalling. This work shall be done in a manner that a straight and perpendicular joint will be secure. All saw cutting should be the full depth of the pavement, driveway, and sidewalk or curb to be removed.

It is the Contractor's responsibility to determine the thickness of the existing pavement and whether or not it contains reinforcement. This work shall be included in the cost of the item being removed. No additional compensation will be allowed for sawing reinforcement.

CONCRETE BREAKERS

When removing pavement, curb and gutter, shoulder, and/or other structures, the use of any type of concrete breakers, which might damage underground public or private utilities, will be at the contractors risk, and JULIE locates must be active and current per state law. The Contractor is prohibited from breaking up concrete by dropping it on the pavement or in any other manner, which in the opinion of the City Staff may damage existing or proposed pavements or other roadway appurtenances.

LIMITS OF REMOVAL

All pay items for removal and replacement must be field measured and marked by the City Staff prior to construction. No payment will be made for any items of work, which have been removed and/or replaced without having been field measured and marked by the City Staff. No additional payment will be made for removal and/or replacement beyond field markings unless specifically authorized by the City Staff.

BACKFILLING OF STRUCTURES

This work shall be in accordance with the applicable portions of Article 550.07 of the Standard Specifications, herein specified and according to the plan details. Structures under or within 2' of sidewalk or driveways, etc. shall be backfilled with course aggregate CA-7. Structures in parkway shall be backfilled according to the details. This work shall not be paid for separately but shall be included in the contract unit price for the work performed on the associated structures.

TRENCH BACKFILL REQUIREMENTS

All utility and service trenches within (2) feet of sidewalk or driveways, or at a distance specified by the City, shall be backfilled with CA-7 and according to the plan details All backfill material shall be properly compacted unless otherwise directed by the appropriate City Division. This work shall not be paid for separately but shall be included in the contract unit price for the work performed.

FINAL ADJUSTMENT OF FRAME & COVER

The final adjustment of the frame and cover shall adhere to the following guidelines based on the location of the structure. For structures located within a paved area, mortar with solid steel shims shall be used between adjusting rings and the top of the structure. Structures located within an unpaved area shall use a preformed HMA joint sealant to be placed between each adjusting ring and the top of the structure. The preformed HMA joint sealant shall be E-Z Stick or an City approved equivalent. The minimum dimension of the preformed material shall be one-half square inch. Frames and adjusting rings located within paved areas shall be set in an IDOT approved concrete SI mixture. Contractors shall familiarize themselves with the City of St. Charles Standard City Details for installation requirements.

RESTORATION

This work shall consist of the placing of 6 inches of Topsoil. Topsoil will be furnished by the City with proper coordination with City staff. Contractor will be required to pick topsoil up from the City yard. Final Sod or seed placement may be completed by City staff. All work shall be in accordance with the applicable portions of Sections 211 and 252 of the Standard Specifications, except as herein modified.

The preparation of the ground surface shall include the removal of the existing sod and excavation, if necessary, of the existing ground to depth, which will permit placement of the required 6 inches of topsoil. Existing landscape areas outside the limits of construction that are damaged by the Contractor or its representatives for temporary storage of materials shall be replaced at the Contractor's expense. Contractor shall be mindful and responsible of restoration limits and shall take all precautions necessary to minimize disturbances to Right-Of-Way and private properties.

Restoration as described shall be included in the cost of adjacent work, which shall include, but not be limited to: Structure Frame Adjustments, Utility Removals/Abandonments, Utility Repair pay items and concrete drive aprons/loading docks. **Restoration areas shall include all damaged turf areas due to trucking operations during construction.**

TEMPORARY PATCH

Where excavations occur within the roadway, this work shall consist of removal of trench backfill material to a depth of 2" below the pavement surface and the placement of a temporary patch. The temporary patch shall consist of asphalt cold, warm or hot mix and shall be compacted to meet the existing asphalt surface elevation and provide for a relatively smooth riding surface.

Temporary patches shall be completed within 24 hours of excavations within the roadway and at the end of the work week. Temporary patches shall be considered included in the associated pay items which may cause excavations within the roadway.

SECTION TWO – PAY ITEM SPECIAL PROVISIONS

Opening to Traffic. Upon approval by the City, completed portions of stabilized base may be opened immediately to low speed local traffic and to construction equipment, provided the curing materials are not impaired and provided the stabilized base is sufficiently stable to withstand marring or permanent deformation.

Quality Control/ Quality Assurance (QC/QA).

- (a) Quality Control by the Contractor. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Control includes the recognition of obvious defects and their immediate correction. This may require increased testing, communication of test results to the job site, modification of operations, suspension of the work, or other actions as appropriate
- (b) Quality Assurance by the City for IDOT or KDOT roadways. The City will conduct independent assurance tests on split samples taken by the Contractor for quality control testing if deemed necessary. The City will conduct stiffness testing to determine micro cracking operations to be conducted by the Contractor.

SIDEWALK REMOVAL

The work shall be done in accordance with applicable portions of Sections 351, 424, and 440 of the Standard Specifications, Standard 424001, except as herein modified.

This work shall consist of removal of the existing concrete sidewalk as stated in the Contract Documents and/or as directed by the City. The work shall include the removal of existing sidewalk, removal of 4" of existing base course, and restoration where new sidewalk is not proposed. Any damage to the existing sidewalks, curbs or driveways remaining in place due to removal operations shall be replaced to the satisfaction of the City at the Contractor's own expense.

Where grading (filling, cutting or shaping), is required, it shall be considered included in the cost of the pay item. Any excavation or disposal of material necessary for the sidewalk removal and restoration, where required, shall be considered included in this item.

This work shall be paid for at the contract unit price per square foot for SIDEWALK REMOVAL, which price shall include all labor, equipment, materials and incidentals necessary to complete the work as described above.

PAVEMENT REMOVAL, SPECIAL

This work shall consist of removing and disposing of the existing HMA surface and underlying base as directed by the City. This work shall be done in accordance with applicable portions of Section 440 of the Standard Specifications, except as herein modified.

The depth of removal shall be sufficient to facilitate the proposed pavement cross section. Additional material other than hot-mix asphalt will be removed as part of this pay item. Asphalt is anticipated to be to a depth of 3 to 5 inches. Base course will make up the remainder of the removal pay item. An additional pay item will be listed for HMA depth in exceedance of 5 inches.

Any existing pavement damage outside the removal limits shall be replaced to the satisfaction of the City at the Contractor's expense.

The Contractor shall be responsible for protecting any curb and gutter from damage during the HMA removal operations. If the Contractor damages the curb and gutter, repairs shall be made to the satisfaction of the City at the Contractor's expense. The City, prior to the Contractor commencing the repair work, must approve the method of repair. Repairs may include complete removal and replacement if the City considers the damage severe.

This work shall be paid for at the contract unit price per square yard for PAVEMENT REMOVAL, SPECIAL, of the uniform depth or variable depth specified, which price shall include all labor, equipment, materials, butt joints and incidentals necessary to complete the work described above. The square yards of PAVEMENT REMOVAL, SPECIAL will only be paid for once, regardless of the number of passes needed to remove the HMA surface and underlying pavement structure.

CURB REMOVAL AND SUBBASE REPLACEMENT

The work shall be done in accordance with applicable portions of Sections 351, 440 and 606 of the Standard Specifications, except as herein modified.

This work shall consist of the removal of the existing curb and gutter or removal of existing pavement or soil at the location of the proposed curb, excavation of material four (4) inches below the new curb, placement of four (4) inches of aggregate base course (CA-6 or approved equal), to the proper grade.

Any excavation required to construct the proposed curb and gutter to the proper elevation, including excavation to subgrade for placement of four (4) inches of aggregate base course (CA-6 or approved equal), shall be include in the contract unit price for **CURB REMOVAL AND SUBBASE REPLACEMENT**. Any excavated material by the Contractor for forming purposes shall be included in this pay item. Any excavated material shall be properly disposed of at the City yard location.

Any pavement area adjacent to the curb and gutter not designed to be removed, which is removed, damaged or otherwise disturbed during construction operations, shall be restored to the satisfaction of the City. The restoration will not be paid for separately but shall be included in the associated pay item.

In curb and gutter sections to remain and where cracks exist, the contractor shall clean, rout and seal cracks with an approved polysulfide sealer (Standard Specifications, Article 606)

If the existing base is soft or unsuitable, the Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

The Contractor must schedule the removal and replacement of the curb and gutter or the new curb construction such that only one side of a given street will be under construction at any one time unless approved by the City. All homeowners shall be given a minimum of 24 hours' notice prior to excavation of their driveway

This work shall be paid for at the contract unit price per foot for **CURB REMOVAL AND REPLACEMENT**, which price shall include all labor, equipment, materials, protective coat and incidentals necessary to complete the work as described above. Final concrete restoration shall be completed by others.

PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL

This work shall be in accordance with applicable portions of Sections 351, 423, and 440 of the Standard Specifications, except as herein modified.

This work shall include removal and disposal of excavated material for Portland Cement Concrete (P.C.C.) driveways located throughout the project limits. Excavated materials shall include but not limited to Portland cement concrete pavement, HMA concrete pavement, aggregate subbase and soil. Excavation to subgrade shall not be paid for separately, but shall be included in the cost of **PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL**.

This work shall include placement of four (4) inches of aggregate base course under eight (8) inches of Portland Cement Concrete Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

All property owners shall be given a minimum 48 hour notice prior to excavation of their driveway or loading dock. This item includes all driveways removed due to conflict with work items included in

the Contract Documents or as directed by the City. Any driveway damaged by the Contractor will not be paid separately, but shall be replaced at the Contractor's own expense.

This work shall be paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT, which price shall include all labor, materials, equipment, protective coat, backfill and incidentals necessary to complete the work as described above. Final 8 inches of Concrete Restoration shall be completed by others.

HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT This work shall be in accordance with applicable portions of Sections 351, 406 and 440 of the Standard Specifications, except as herein modified.

This work shall include removal and disposal of excavated material for Hot-Mix Asphalt (HMA) driveways located throughout the project limits. Excavated materials shall include but not limited to Portland cement concrete pavement, HMA concrete pavement, aggregate subbase and soil. Excavation to subgrade shall not be paid for separately, but shall be included in the cost of HOT-MIX ASPHALT DRIVEWAY REMOVAL.

This work shall include placement of six (6) inches of aggregate base course under three (3) inches (or match existing, whichever is thicker) of existing HMA surface course. If the existing base is soft or unsuitable, the Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

All property owners shall be given a minimum 48 hour notice prior to excavation of their driveway. This item includes all driveways removed due to conflict with work items included in the Contract Documents or as directed by the City. Any driveway damaged by the Contractor will not be paid separately, but shall be replaced at the Contractor's own expense.

This work shall be paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY REMOVAL, which price shall include all labor, material, equipment, backfill and incidentals necessary to complete the work as described above. Final 3 inch Asphalt Restoration shall be complete by others.

REMOVE VALVE BOX & REPLACE WITH 4' DIA. VALVE VAULT

This work shall consist of the removal of the existing valve box, and the installation of a 48" diameter valve vault at locations as shown on the plans or as directed by the City, and shall be done in accordance with City of St. Charles Standards, and the Standard Specifications for Water and Sewer Main Construction in Illinois, most current edition.

Valve vault shall be constructed of 6" wide reinforced concrete sections conforming to ASTM C-478. Butyl rubber strips shall be placed between the tongue and groove sections. The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and water main elevation before coordinating material ordering or commencing with the work.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure.

This work shall be paid for at the contract unit price each for REMOVE VALVE BOX & REPLACE WITH 4' DIA. VALVE VAULT which price shall include all labor, additional materials, equipment, and incidentals necessary to complete the work specified to comply with the City of St. Charles requirements including, but not limited to excavation, removal of excavated material and disposal of removed structures, hauling of trench backfill, installation of valve and accessories, frame and cover, and fittings. Contractors shall familiarize themselves with the City of St. Charles Public Works City Details for more detailed specifics.

REMOVE VALVE BOX & REPLACE WITH 6' DIA. VALVE VAULT

This work shall consist of the removal of the existing valve box, and the installation of a 60" diameter valve vault at locations as shown on the plans or as directed by the City, and shall be done in accordance with City of St. Charles Standards, and the Standard Specifications for Water and Sewer Main Construction in Illinois, most current edition.

Valve vault shall be constructed of 6" wide reinforced concrete sections conforming to ASTM C-478. Butyl rubber strips shall be placed between the tongue and groove sections. The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and water main elevation before coordinating material ordering or commencing with the work.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure.

This work shall be paid for at the contract unit price each for REMOVE VALVE BOX & REPLACE WITH 6' DIA. VALVE VAULT which price shall include all labor, additional materials, equipment, and incidentals necessary to complete the work specified to comply with the City of St. Charles requirements including, but not limited to excavation, removal of excavated material and disposal of removed structures, hauling of trench backfill, installation of valve and accessories, frame and cover, and fittings. Contractors shall familiarize themselves with the City of St. Charles Public Works City Details for more detailed specifics.

**REBUILD TOP OF STRUCTURE or
REBUILD TOP OF STRUCTURE – NEW FRAME AND GRATE**

This work shall consist of the removal of the existing frame and lid/grate, adjusting rings and eccentric manhole cone or flat top, and the installation of a new concentric manhole cone or flat top as directed by the City, concrete adjusting rings and frame and lid at the location as shown on the plans or as directed by the City, and shall be done in accordance with City of St. Charles Standards and the Standard Specifications for Water and Sewer Main Construction in Illinois, most current edition. Structure sections shall be constructed of 6" wide reinforced concrete sections conforming to ASTM C-478. Butyl rubber strips shall be placed between the tongue and groove sections. The Contractor shall be responsible for the height measurements of the existing cone section, adjusting rings and manhole frame to ensure the height of the new components shall match the existing pavement grade.

Where noted on the plans or as directed by the City, the frame and lid/grate shall be replaced. The existing frames and lids shall remain the property of the City of St Charles. The Contractor shall deliver the existing frames and lids to the City of St Charles Public Works facility, or as directed by the City. The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure.

This work shall be paid for at the contract unit price each for REBUILD TOP OF STRUCTURE or REBUILD TOP OF STRUCTURE – NEW FRAME AND GRATE, which price shall include all labor, material, equipment, and incidentals necessary to complete the work specified to comply with the City of St. Charles' requirements including, but not limited to, pavement removal, excavation, removal of excavated material and disposal of removed structures, supply and compaction of trench backfill, installation of new flat top or cone section, adjusting rings, frame and lid or grate. Contractors shall familiarize themselves with the City of St. Charles Details.

FIRE HYDRANT ASSEMBLY - REMOVE & REPLACE

This work shall consist of the removal and replacement of fire hydrants, auxiliary valves and valve boxes at locations as shown on the plans. Existing materials shall be delivered to the Department of Public Works.

The contractors shall familiarize themselves with the City of St. Charles Details for additional information.

All fire hydrants shall be equipped with an auxiliary valve and cast iron valve box. The auxiliary valve shall be six-inch (6") ductile iron water pipe conforming to AWWA Standard C151, C111, and C104. The valve boxes shall be of the adjustable type, shall be set at finished grade, and shall have the valve box covers stamped "Water".

This item shall be paid at the contract unit price per each for FIRE HYDRANT ASSEMBLY – REMOVE & REPLACE, which price shall include the cost of all labor, materials, and equipment necessary to remove the existing fire hydrant and deliver to public works facility, install the new fire hydrant, auxiliary valve, auxiliary valve box with stabilizer, and line extension as detailed in the Sewer and Water Specifications, and to the satisfaction of the City.

VALVE BOXES TO BE ADJUSTED – WITH STABILIZER or REMOVE AND REPLACE VALVE BOX – WITH STABILIZER

Auxiliary valve box replacements and adjustments shall follow the Fire Hydrant Detail and shall be installed with a stabilizer (Valve box adaptor #2 type A, as made by Adaptor, Inc. or approved equal). Valve boxes shall be of the adjustable type, shall be set at finished grade, and shall have the valve box covers stamped "Water".

This item shall be paid at the contract unit price per each for **VALVE BOXES TO BE ADJUSTED – WITH STABILIZER** or **REMOVE AND REPLACE VALVE BOX – WITH STABILIZER**, which price shall include the cost of all labor, materials, and equipment necessary to remove the existing valve box if necessary, adjust or install the new valve box with stabilizer, provide a line extension if needed, as detailed in the Sewer and Water Specifications, and any incidentals as required for a complete and operational valve box, to the satisfaction of the City.

Backfill and restoration shall be considered included in the cost of VALVE BOXES TO BE ADJUSTED – WITH STABILIZER or REMOVE AND REPLACE VALVE BOX – WITH STABILIZER.

1” COPPER WATER SERVICE WITH B-BOX & CONNECTION TO EXISTING or 1” COPPER WATER SERVICE WITH B-BOX

For 1” COPPER WATER SERVICE WITH B-BOX & CONNECTION, TO EXISTING the work shall consist of the disconnection and disposal of the existing water service between the water main and the curb stop, and reconnection of the proposed water service to the water main. The work shall include the installation of a new 1” corporation stop and tap connection to the water main, tapping sleeve, any necessary 1” copper tubing, the curb box and curb stop, connections and all fittings necessary to reconnect the existing water service (near the property line or as shown on the plans) to the water main.

Work shall be done in accordance with the City’s water service detail, or as directed by the City Staff as specified herein. This work shall be performed in accordance with the applicable sections of the Standard Specifications and all local codes and ordinances. The Contractor should familiarize themselves with the City of St. Charles standard Engineering details. Buffalo boxes in driveways and sidewalks shall be adjusted as needed when work is done. The cost of adjusting the buffalo boxes shall be included in the cost of this bid item.

This item shall be paid for at the contract Linear Foot price for 1” COPPER WATER SERVICE WITH B-BOX CONNECTION, which price shall be payment in full for performing all work as specified herein and as shown on the detail, including all labor, including excavation, disposal of materials, tapping sleeve, corporation stop, copper pipe, curb stop and curb box, necessary connector and any required final curb box adjustments to finished elevations, backfilling including granular trench backfill material where needed, and the disconnection of the existing water service at the main, for a complete water service operation installation. Restoration shall be included in the cost of this bid item.

REMOVE & REPLACE B-BOX

This work shall consist of the removal and replacement of B-Boxes at locations as indicated on the plans or as directed by the City. B-Boxes in driveways and sidewalks shall be adjusted as needed to meet finished grade. The cost of adjusting the B-Box to finished grade shall be included in the cost of this pay item. See Copper Water Service Connection Detail for further information.

This work shall be paid for at the contract unit price each for REMOVE & REPLACE B-BOX, which price shall include all labor, removal and disposal of excavated materials, backfill or granular trench

backfill, restoration and equipment necessary to complete the work specified to comply with the City of St. Charles requirements.

NEW 48" DIA. SANITARY MANHOLE TO 10' IN DEPTH

This work shall consist of the installation of a 48" inner diameter sanitary manhole using precast reinforced concrete bases and sections up to 10' in depth, at locations, or as directed by the staff.

The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevation before ordering or commencing with any sewer work. Manhole installation shall comply with ASTM C 891. Contractors should familiarize themselves with the City of St. Charles Standard Engineering Details for Sanitary Manholes.

This work shall be paid for at the contract unit price each for NEW 48" DIA. SANITARY MANHOLE TO 10' IN DEPTH, which price shall be payment in full for performing the work as specified therein and shall include all saw-cutting, all excavation, hauling and compaction of granular backfill (refer to City of St Charles standard details for specifics). Also included in the unit cost will be any flexible manhole pipe boots with stainless steel bands and Cor-ten bolts, new frames and lids, frame sealing to the barrel section (mortar in paved areas), any necessary structure adjustments required to match final grades, internal chimney seal supply and installation, the replacement or relaying of sewer pipes as necessary (minimum 3-feet), which included all necessary connectors (non-shear mission bands), and any necessary backfill required around the structure

NEW 48" DIA. SANITARY MANHOLE FROM 11' to 20' IN DEPTH

This work shall consist of the installation of a 48" inner diameter sanitary manhole using precast reinforced concrete bases and sections from to 11' to 20' in depth, at locations, or as directed by the staff.

The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevation before ordering or commencing with any sewer work. Manhole installation shall comply with ASTM C 891. Contractors should familiarize themselves with the City of St. Charles Standard Engineering Details for Sanitary Manholes.

This work shall be paid for at the contract unit price each for NEW 48" DIA. SANITARY MANHOLE FROM 11' TO 20' IN DEPTH, which price shall be payment in full for performing the work as specified therein and shall include all saw-cutting, all excavation, hauling and compaction of granular backfill (refer to City of St Charles standard details for specifics). Also included in the unit cost will be any flexible manhole pipe boots with stainless steel bands and Cor-ten bolts, new frames and lids, frame sealing to the barrel section (mortar in paved areas), any necessary structure adjustments required to match final grades, internal chimney seal supply and installation, the replacement or relaying of sewer pipes as necessary (minimum 3-feet), which included all necessary connectors (non-shear mission bands), and any necessary backfill required around the structure

REMOVE & REPLACE 48" DIA. SANITARY MANHOLE OR 48" DIA. SANITARY DROP MANHOLE TO 10' IN DEPTH

This work shall consist of the removal and replacement of existing sanitary manholes or drop manholes at locations as indicated in the plans, or as directed by the Engineer. Refer to special provision for New 48" Dia. Sanitary Manhole for specifications of materials and rim adjustments.

This work shall be paid for at the contract unit price each for REMOVE & REPLACE 48" DIA. SANITARY MANHOLE OR 48" DIA. SANITARY DROP MANHOLE TO 10', which price shall be payment in full for performing the work as specified therein and shall include all saw-cutting, all excavation and backfill, supply and compaction of granular backfill (refer to City of St Charles standard details for specifics). Also included in the unit cost will be any flexible manhole pipe boots with stainless steel bands and Cor-ten bolts, new frames and lids, drop connection, additional barrel sections for extra depth manholes, frame sealing to the barrel section, any necessary structure adjustments required to match final grades, internal chimney seal supply and installation, the replacement or relaying of sewer pipes as necessary (minimum 3-feet), which included all necessary connectors (non-shear mission bands), and any necessary pavement patches required around the structure. Depth measurement will be from the deepest invert to final grade.

REMOVE & REPLACE 48" DIA. SANITARY MANHOLE OR 48" DIA. SANITARY DROP MANHOLE FROM 11' to 20' IN DEPTH

This work shall consist of the removal and replacement of existing sanitary manholes or drop manholes at locations as indicated in the plans, or as directed by the Engineer. Refer to special provision for New 48" Dia. Sanitary Manhole for specifications of materials and rim adjustments.

This work shall be paid for at the contract unit price each for REMOVE & REPLACE 48" DIA. SANITARY MANHOLE OR 48" DIA. SANITARY DROP MANHOLE FROM 11' TO 20' IN DEPTH, which price shall be payment in full for performing the work as specified therein and shall include all saw-cutting, all excavation and backfill, supply and compaction of granular backfill (refer to City of St Charles standard details for specifics). Also included in the unit cost will be any flexible manhole pipe boots with stainless steel bands and Cor-ten bolts, new frames and lids, drop connection, additional barrel sections for extra depth manholes, frame sealing to the barrel section, any necessary structure adjustments required to match final grades, internal chimney seal supply and installation, the replacement or relaying of sewer pipes as necessary (minimum 3-feet), which included all necessary connectors (non-shear mission bands), and any necessary pavement patches required around the structure. Depth measurement will be from the deepest invert to final grade.

REMOVE & REPLACE, SANITARY SEWER SERVICE, 6"

This work shall consist of the replacement of existing sanitary sewer service pipe sections as indicated on drawings and/or as directed by City Staff

It is the Contractor's responsibility to field-verify the exact locations and elevations of existing utilities and existing sewer service and coordinate with city staff, any changes to the proposed utility layout and/or elevations.

Non-shear mission couplings shall be used for connections to existing sanitary sewer pipe The Contractor shall refer to the City of St. Charles Standard Engineering details for all pipe connections, trench backfill and bedding requirements, and service installation requirements.

This item shall be paid for at the contract unit price per linear foot of REMOVE & REPLACE, SANITARY SEWER SERVICE, 6" which price shall be payment in full for all labor, and equipment necessary for the removal and disposal of the excavated material, for the removal of existing pipe, bedding preparation fittings, gaskets, connection to existing service and manholes, supply and compaction of granular trench backfill and any incidentals necessary, all for a complete installation.

SANITARY MANHOLE CHIMNEY SEAL

For all sanitary sewer manhole adjustments and rebuilds that do not receive a concrete collar, external chimney seals shall be provided. Chimney seal installation work shall include furnishing and installing an external chimney seal as manufactured by "Infishield," or approved equal, and any necessary materials to provide a complete and functional chimney seal. This work shall be paid for at the contract unit price for SANITARY MANHOLE CHIMNEY SEAL. See Sanitary Manhole Chimney Seal Detail for additional information.

REMOVE & REPLACE CATCH BASIN; NEW CATCH BASIN

This work shall consist of the replacement of existing catch basins of the diameter noted on the plans or as directed by the City. The Contractor is to provide installation of precast concrete reinforced catch basins complying with ASTM 478 standards.

This work shall be in accordance with Section 602 of the Standard Specifications and the City of St. Charles requirements. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevations, and pipe diameters.

The type of lid or grate (open, closed, etc.) shall be as indicated on the drawings or as directed by City. Type 3 frames shall be Neenah R-3277-A, combination frame, grate and curb box. All structures with open lids or grates shall be provided with temporary silt filter baskets. Catch basin will be supplied by the city and delivered to site one day prior to construction. The City will work with the Contractor to stake proposed structure locations as necessary. Approval shall be obtained before commencing with structure installation.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure.

Sediment control shall consist of furnishing, installation, maintenance and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag to collect sediment in surface storm water runoff, in accordance with Article 280.04(c) of the Standard Specifications at locations as directed by the City, including, but not limited to pavement removal, excavation, removal of excavated material and disposal of removed structures, supply and compaction of trench backfill, supply and installation of frame and cover.

This work shall be paid for at the contract unit price each for **REMOVE AND REPLACE CATCH BASIN**, which price shall be payment in full for performing the work as specified therein and shall include installation of new frame and lid, all excavation, removal of excavated material and disposal of removed structures, sediment control, installation and compaction of trench backfill (refer to City specifications for type of backfill material based on location of structure). All items addressed, including steel reinforced polyurethane steps, all pipe reconnections (with a minimum of 3 feet of pipe

to be replaced), all non-shear bands, frame, frame sealing to the barrel section (mortar in paved areas, easy stick in parkway areas), grate and lid installation, erosion control measures and any necessary structure adjustments required to match final grades, shall be included in the contract unit price for REMOVE & REPLACE CATCH BASIN 2' & 4' Dia.; NEW CATCH BASIN 2' & 4' Dia..

REMOVE & REPLACE 4' DIA. WATER VALVE MANHOLE; REMOVE & REPLACE 5' DIA. WATER VALVE MANHOLE

This work shall consist of the removal and replacement of existing Water manholes at locations as indicated in the plans, or as directed by the City.

Manholes will be provided by the city and delivered to construction site prior to start. The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevation before ordering or commencing with any water work. Manhole installation shall comply with ASTM C 891. Contractors should familiarize themselves with the City of St. Charles Standard City Details for Water Valve Manholes.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure.

This work shall be paid for at the contract unit price each for REMOVE & REPLACE WITH 4' DIA. VALVE VAULT; REMOVE & REPLACE WITH 5' DIA. VALVE VAULT which price shall include all labor, additional materials, equipment, and incidentals necessary to complete the work specified to comply with the City of St. Charles requirements including, but not limited to excavation, removal of excavated material and disposal of removed structures, hauling of trench backfill, installation of valve and accessories, frame and cover, and fittings. Contractors shall familiarize themselves with the City of St. Charles Public Works City Details for more detailed specifics.

MANHOLE, 5'- DIAMETER, CLOSED LID

This work shall consist of the installation of a new 5' diameter manhole diameter over the existing storm sewer blind connection. The Contractor is to provide precast concrete reinforced manhole complying with ASTM 478 standards.

This work shall be in accordance with Section 602 of the Standard Specifications and the City of St. Charles requirements. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevations, and pipe diameters.

Manhole installation shall comply with ASTM C891. The City will work with the Contractor to stake proposed structure locations as necessary. Approval shall be obtained before commencing with structure installation.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure.

This work shall be paid for at the contract unit price each for **STORM SEWER MANHOLE, 5' – DIAMETER**, which price shall include all labor, additional materials, equipment, and incidentals

necessary to complete the work specified to comply with all excavation, removal of excavated material and disposal of removed pipes, sediment control, compaction of trench backfill (refer to City specifications for type of backfill material based on location of structure). All items addressed, including steel reinforced polyurethane steps, all pipe reconnections (with a minimum of 3 feet of pipe to be replaced), all non-shear bands, frame, frame sealing to the barrel section (mortar in paved areas, easy stick in parkway areas), grate and lid installation, erosion control measures and any necessary structure adjustments required to match final grades, shall be included in the contract unit price for STORM SEWER MANHOLE, 5' – DIAMETER.

**ADJUST FRAME
or ADJUST FRAME - NEW FRAME & LID
(IN PAVEMENT, CURB, SIDEWALK or PARKWAY)**

This work shall consist of the removal and delivery/disposal of existing frames and lids not designated for reuse, removal and disposal of concrete adjusting rings, installation of new concrete adjusting rings and the installation of new frames and lids/grates to the proper finished grade as designated by the City. All work shall be in accordance with the applicable portions of Section 603 and 604 of the Standard Specifications, except as herein modified, and the City of St. Charles requirements.

Where new frames are called for on the plans, or as directed by the City the existing frames and lids shall remain the property of the City of St Charles. The Contractor shall the existing frames and lids to the City of St Charles Public Works facility, or as directed by the City.

Sanitary manholes in sidewalk or parkway shall include the installation of external chimney seals. Refer to provision for SANITARY MANHOLE CHIMNEY SEAL.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure.

Sediment control shall consist of furnishing, installation, maintenance and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag to collect sediment in surface storm water runoff, in accordance with Article 280.04(c) of the Standard Specifications at locations as directed by the City.

Manholes, catch basins, inlets, and valve vaults shall all be considered as structures for this pay item. This item shall be paid for at the contract unit price per each for ADJUST FRAME OR ADJUST FRAME - NEW FRAME & LID, of the type specified: (Pavement, Curb, Sidewalk or Parkway). This price shall include labor, materials, equipment and sediment control required for adjusting the existing frame and lid (or grate), including the preformed HMA joint sealant or mortar, pavement removal, excavation, removal and disposal of excavated material, concrete collar where delivery of old frames to the City of St. Charles facility and the installation of the new frame and lid

**STORM SEWER REMOVAL AND REPLACEMENT
or SANITARY SEWER PIPE, REMOVAL AND REPLACEMENT**

This work shall consist of the removal and replacement of existing and/or construction of new storm or sanitary sewer systems as indicated on drawings and/or as directed by the City. Work will consist of a depth less than 10' deep and typically no greater than 60' of pipe replacement.

One of the following pipe materials shall be used and supplied by the city for this project:

Storm Sewer System:

Plastic Polyvinyl Chloride (PVC) Pressure-Rated pipe, conforming to ASTM D 2241, SDR 21 or 26. Plastic Pressure pipe joints shall be in conformance with ASTM D3139, using Flexible Elastomeric Seals.

Reinforced Concrete Low-Head Pressure Pipe (RCP), conforming to ASTM C 361, Class C-25, with bell-and-spigot joints and rubber gasket with the following minimum wall thickness: 12" pipe-2 inch wall; 15" thru 24"-3 inch; 27" thru 30" 3.25 inch; Above 30"-4 inch. Sanitary Sewer System:

Plastic Polyvinyl Chloride (PVC) Pressure-Rated pipe, conforming to ASTM D 2241, SDR 21 or 26. Plastic Pressure pipe joints shall be in conformance with ASTM D3139, using Flexible Elastomeric Seals.

Pipe installation shall conform to the requirements of the latest edition of the Standard Specifications for Water & Sewer Main Construction in Illinois, Section 31-1.02 to 31-1.10 inclusive, ASTM D 2321 and City of St. Charles' requirements.

It is the Contractor's responsibility to field verify the exact locations and elevations of existing utilities and existing sewer service connections and coordinate with City any changes to the proposed utility layout and/or elevation.

Non-shear couplings shall be used for connections to existing storm sewer pipes. The Contractor shall refer to the City of St. Charles Specifications and Details for all pipe connections, trench backfill and bedding requirements, service installation requirements and temporary patches. Unnecessary joints in the replaced section of pipe will not be allowed.

All newly installed sewer lines will be televised by the City and must be approved by the Public Works Citying Division before pavement placement. Any defects, poor workmanship, etc. found during televising shall be removed and replaced at the Contractor's expense. Any spoils, stone or construction material found in the pipes shall be jetted and cleaned prior to City approval.

This items shall be paid for at the contract unit price per linear foot of STORM SEWER REMOVAL AND REPLACEMENT, STORM SEWER PIPE, VARIOUS SIZES & MATERIAL, or SANITARY SEWER PIPE, REMOVAL AND REPLACEMENT, which price shall be payment in full for all labor, material, and equipment necessary for the pavement removal, excavation, removal and disposal of the excavated material, removal of existing pipe, bedding preparation, fittings, gaskets, connection to existing service connections and manholes, and supply and compaction of granular trench backfill, testing, all for a complete installation.

TEMPORARY PAVEMENT, SPECIAL

This work shall consist of construction and maintenance of an aggregate or asphalt (UPM) surface course for roadways and temporary access to abutting properties (driveway aprons) during construction operations or temporary surface prior to full restoration.

When directed by the City, temporary access shall be constructed of aggregate or asphalt (UPM) as to the dimensions specified by the City. After these temporary access locations have served their purpose, the aggregate/asphalt shall be removed and disposed of and all disturbed areas shall be restored with 4 inches of topsoil and sod.

Temporary accesses shall be easily and safely driven over by passenger vehicles.

This work shall include, transporting, placing, maintaining, and removing and re-using or disposing of aggregate or asphalt, disposal of any spoils removed in creation of the TEMPORARY PAVEMENT, SPECIAL, and restoration of the area with topsoil and sod. Any curb removed for the purpose of a temporary access shall be paid for separately under its respective pay item. This work will be measured in place and paid for in square yards of TEMPORARY PAVEMENT, SPECIAL.

Section III SCHEDULE FOR HOURLY RATES

Each bidder is to provide pricing for labor and equipment rates. The attached "Schedule for Hourly Rates" will serve as a pricing agreement between the Contractor and the City. Hourly prices will be used when the work is not covered in the specifications above, or when work sites or conditions are other than what may reasonably considered to be normal. Prices will be firm until April 30, 2018. Use of the Schedule hourly rates needs to be agreed upon by the city in writing prior to work start.

Additional Clarifications – Award Criteria

All bid received in accordance with this request will be evaluated based on the criteria established by the City which may include but not be limited to bid price, quality, experience of the bidder, responsiveness of the bidder, adaptability of equipment for the specific intended use and conformity to bid specification. Because the units required are unknown, prices will be factored utilizing a quantity of one (1) of each unit. The City reserves the right to reject any and or all bids for any reason, whether or not the bid is lowest and to waive any irregularities or technicalities in any bid. The contract, if awarded, will be awarded to the bidder whose bid is determined to be in the best interest of the City. Once delivered, all bids are irrevocable for a period of 30 days from the deadline.