RESOLUTION NO. _____

A RESOLUTION TO AWARD CONSENT DECREE CONTRACT NO. W-12-026-201 TO CHASE PLUMBING & MECHANICAL, INC., CHATTANOOGA, TN, DUPONT PUMP STATION AND BASIN IMPROVEMENTS – PHASE I, IN THE AMOUNT OF FIVE MILLION FOUR HUNDRED FORTY-EIGHT THOUSAND EIGHT HUNDRED TWO DOLLARS ($5,448,802.00), WITH A CONTINGENCY AMOUNT OF TWO HUNDRED SEVENTY-TWO THOUSAND FOUR HUNDRED FORTY DOLLARS ($272,440.00), FOR AN AMOUNT NOT TO EXCEED FIVE MILLION SEVEN HUNDRED TWENTY-ONE THOUSAND TWO HUNDRED FORTY-TWO DOLLARS ($5,721,242.00), SUBJECT TO SRF LOAN APPROVAL.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, it is hereby awarding Consent Decree Contract No. W-12-026-201 to Chase Plumbing & Mechanical, Inc., Chattanooga, TN, Dupont Pump Station and Basin Improvements – Phase I, in the amount of $5,448,802.00, with a contingency amount of $272,440.00, for an amount not to exceed $5,721,242.00, subject to SRF loan approval.

ADOPTED: _____, 2016

/mem

City of Chattanooga

Resolution/Ordinance Request Form

Date Prepared: February 24, 2016

Preparer: Dennis Malone **Department: Public Works**

Brief Description of Purpose for Resolution/Ordinance: **Res./Ord. #** _____ **Council District #** 3

A City Council resolution is requested to award Consent Decree Contract No. W-12-026-201, Dupont Pump Station and Basin Improvements - Phase I, to Chase Plumbing & Mechanical, Inc., Chattanooga, TN, in the amount of $5,448,802.00 with a contingency amount of $272,440.00 for an amount not-to-exceed $5,721,242.00, subject to SRF Loan Approval.

Name of Vendor/Contractor/Grant, etc.	**Chase Plumbing & Mechanical, Inc.**	New Contract/Project? (Yes or No)	Yes
Total project cost	$ 5,721,242.00	Funds Budgeted? (YES or NO)	Yes
Total City of Chattanooga Portion	$ 5,721,242.00	Provide Fund	6012
City Amount Funded	$ 5,721,242.00	Provide Cost Center	K37134
New City Funding Required	$ 0	Proposed Funding Source if not budgeted	
City's Match Percentage	%	Grant Period (if applicable)	**SRF 2013-318**

List all other funding sources and amount for each contributor.

Amount(s)	Grantor(s)	
$5,721,242.00	**SRF 2013-318**	6012 - K37134

Agency Grant Number

CFDA Number if known

Other comments: (Include contingency amount, contractor, and other information useful in preparing resolution)

Funding is ISS Funding from previous FY. Consent Decreee projects.

Approved by: _____

Reviewed by: FINANCE OFFICE DESIGNATED OFFICIAL/ADMINISTRATOR

Please submit completed form to @budget, City Attorney and City Finance Officer

Revised: 1/26/09

CTI Engineers, Inc.
1122 Riverfront Parkway
Chattanooga, TN 37402
Phone 423.267.7613
Fax 423.267.0603
www.ctiengr.com

February 23, 2016

Mr. Dennis Malone
Assistant City Engineer
Department of Public Works
Development Resource Center
Engineering Division
1250 Market Street, 2nd Floor
Chattanooga TN 37402

Subject: Recommendation of Award
DuPont Pump Station Basin Improvements – Phase I
City of Chattanooga
Contract No. W-12-026-201
CTI Project No. C13029-2-01

Dear Dennis:

Enclosed is the certified Bid Tabulation of bids received on the subject project on February 4, 2016.

Three bids were received; however, the bid submitted by Layne Inliner was withdrawn following a formal request submitted by Layne Inliner and accepted by the City.

The remaining bids were reviewed and entered into the attached tabulation of bids. The apparent low bidder at $5,448,802.00 was:

Chase Plumbing & Mechanical, Inc.
6112 Airways Boulevard
Chattanooga, TN 37421

The second bidder was SAK Construction, LLC, out of O'Fallon, Missouri, at a total bid of $9,892,195.00. The Engineer's opinion of probable cost was $4,933,208.

A thorough review of Chase's bid and bid submittal documents have been made by CTI and all appears to be complete and in order. CTI also contacted an extensive list of references for both Chase and their proposed subcontractors. While Chase's preferred subcontractor for the speciality CIPP work was not accepted by the City, Chase submitted an alternate subcontractor that did fully comply with the five (5) years of experience requirement.

CTI therefore recommends award of the subject contract to Chase Plumbing & Mechanical, Inc., as the lowest responsible bidder.

Sincerely,

Allen D. Stephens, P.E.
Project Manager

ADS/rah
cc: Chris Palmer, Jacobs Engineering (via e-mail)
Enclosure: Bid Tabulation
C13029/Chattanooga/DuPont PS Ph I/correspondence/474315

BID TABULATION

DUPONT PUMP STATION AND BASIN IMPROVEMENTS - PHASE I
CONTRACT NO. W-12-026-201
CITY OF CHATTANOOGA, TENNESSEE

Bid Opening Time: 2:00 PM Date: February 4, 2016 Place: City Hall Chattanooga, TN	**Bidder:**	**Chase Plumbing & Mechanical, Inc.** 6112 Airways Blvd. Chattanooga, TN 37421	**SAK Construction, LLC** 864 Hoff Road O'Fallon, MO 63366
	Bid Bond:	North America Specialty Insurance Co. Manchester, NH	Travelers Casualty and Surety Co. Of America Hartford, CT

BID SUMMARY

Schedule A Bid Total, Items 1 through 22, Inclusive	**$4,769,299.50**	**$9,033,010.00**
Schedule B Bid Total, Items 1 through 9, Inclusive	**679,502.50**	**859,185.00**
Schedules A + B Total, Inclusive	**$5,448,802.00**	**$9,892,195.00**

Note: Layne Inliner, 4520 N. State Road 37, Orleans, IN 47452, Bid was withdrawn.

I hereby certify that the following is a true and accurate tabulation of bids received at 2:00 p.m. local time on Thursday, February 4, 2016, at City Hall, Purchasing Department, Suite G13, 101 East 11th Street, Chattanooga, TN 37402, for the construction of the Dupont Parkway Pump Station and Basin Improvements - Phase I, Contract No. W-12-026-201, for the City of Chattanooga, Tennessee

By Allen D. Stephens
Allen D. Stephens, P.E. Project Manager
Tennessee License No. 11950
CTI Engineers, Inc.
1122 Riverfront Parkway
Chattanooga, TN 37402

				Chase Plumbing & Mechanical, Inc.		SAK Construction, LLC	
Item No.	**Description**	**Estimated Qty.**	**Unit**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**
	SCHEDULE A						
1.	48-Inch Sewer Rehabilitation						
a.	Pre-Installation Cleaning – Normal	2,900	LF	$ 12.50	$ 36,250.00	$ 75.00	$ 217,500.00
b.	Pre-Installation Cleaning - Heavy (add on)	700	LF	18.00	12,600.00	75.00	52,500.00
c.	28.5 mm CIPP	800	LF	236.00	188,800.00 [1]	900.00	720,000.00
d.	34.5 mm CIPP	2100	LF	268.00	562,800.00 [2]	1,000.00	2,100,000.00
e.	Bypass Pumping System Necessary to Prepare and Install CIPP	1	LS	477,400.00	477,400.00	1,300,000.00	1,300,000.00
2.	24-Inch Sewer Rehabilitation						
a.	Pre-Installation Cleaning – Normal	3000	LF	11.50	34,500.00	5.00	15,000.00
b.	Pre-Installation Cleaning - Heavy (add on)	700	LF	13.90	9,730.00	3.00	2,100.00
c.	13.5 mm CIPP	300	LF	132.00	39,600.00	200.00	60,000.00
d.	16.5 mm CIPP	2700	LF	139.00	375,300.00	210.00	567,000.00
e.	Point Repair (0' - 10' depth of cut)	1	EA	16,740.00	16,740.00	21,000.00	21,000.00
f.	Bypass Pumping System Necessary to Prepare and Install CIPP & Point Repair	1	LS	103,400.00	103,400.00	300,000.00	300,000.00
3.	15/16-Inch Sewer Rehabilitation						
a.	Pre-Installation Cleaning – Normal	1400	LF	9.00	12,600.00	4.00	5,600.00 [3]
b.	Pre-Installation Cleaning - Heavy (add on)	400	LF	10.50	4,200.00	3.00	1,200.00
c.	9 mm CIPP	1400	LF	71.00	99,400.00	100.00	140,000.00
d.	Point Repair (0' - 15' depth of cut)	1	EA	17,000.00	17,000.00	21,000.00	21,000.00
e.	Bypass Pumping System Necessary to Prepare and Install CIPP & Point Repair	1	LS	63,486.50	63,486.50	43,500.00	43,500.00
4.	12-Inch Sewer Rehabilitation						
a.	Pre-Installation Cleaning – Normal	400	LF	7.00	2,800.00	4.00	1,600.00

				Chase Plumbing & Mechanical, Inc.		SAK Construction, LLC	
Item No.	Description	Estimated Qty.	Unit	Unit Price	Total Price	Unit Price	Total Price
b.	Pre-Installation Cleaning - Heavy (add on)	100	LF	$ 8.00	$ 800.00	$ 2.00	$ 200.00
c.	7.5 mm CIPP in place, including Bypass Pumping, etc. for Complete Installation.	400	LF	60.00	24,000.00	80.00	32,000.00
d.	Point Repair (0 - 15' depth of cut) in place, including Bypass Pumping, etc. for Complete Repair.	1	EA	16,000.00	16,000.00	20,000.00	20,000.00
5.	10-Inch Sewer Rehabilitation						
a.	Pre-Installation Cleaning – Normal	1000	LF	7.00	7,000.00	4.00	4,000.00
b.	Pre-Installation Cleaning - Heavy (add on)	250	LF	8.00	2,000.00	3.00	750.00
c.	Point Repair (0' - 10' depth of cut) in place, including Bypass Pumping, etc. for Complete Repair.	3	EA	14,500.00	43,500.00	18,000.00	54,000.00 [4]
6.	8-Inch Sewer Rehabilitation						
a.	Pre-Installation Cleaning – Normal	5700	LF	6.00	34,200.00	4.00	22,800.00
b.	Pre-Installation Cleaning - Heavy (add on)	1200	LF	8.00	9,600.00	3.00	3,600.00
c.	6 mm CIPP in place, including Bypass Pumping, etc. for a Complete Installation.	5700	LF	32.00	182,400.00	75.00	427,500.00
d.	Point Repair (0' - 10' depth of cut) in place, including bypass pumping, etc. for Complete Repair.	31	EA	12,000.00	372,000.00	15,000.00	465,000.00
e.	Point Repair (11' - 15' depth of cut) in place, including Bypass Pumping, etc. for a Complete Repair.	4	EA	17,500.00	70,000.00	22,000.00	88,000.00
f.	Point Repair (16' - 20' depth of cut) in place, including Bypass Pumping, etc. for Complete Repair.	1	EA	25,500.00	25,500.00	32,000.00	32,000.00
g.	Epoxy Patch in place, including bypass pumping, etc. for Complete Patch.	2	EA	3,850.00	7,700.00	3,800.00	7,600.00
7.	6-Inch Sewer Rehabilitation						
a.	Pre-Installation Cleaning – Normal	50	LF	6.50	325.00	4.00	200.00
b.	Pre-Installation Cleaning - Heavy (add on)	50	LF	7.00	350.00	4.00	200.00
c.	Point Repair (0' - 10' depth of cut) in place, including Bypass Pumping, etc. for Complete Repair.	1	EA	11,500.00	11,500.00	15,000.00	15,000.00
8.	Open Cut Sewer Replacement						
a.	Remove Existing 8-Inch Diameter Sewer and Replace with 8-Inch Diameter PVC Pipe Sewer (0'-10' depth of cut); including Bypass Pumping (if required), Excavation, Removal of Old Sewer Pipe, Standard Bedding, Installation of New Sewer Pipe, Backfill of Trench from Top of Bedding to Base of Pavement (including Mineral Aggregate Base) per details, flowable fill (if required),etc. for a complete installation (Sheet 22). Existing Pavement Removal and Pavement Replacement Costs shall be included in Item 15.	40	LF	245.00	9,800.00	300.00	12,000.00
b.	Connect to Existing Manholes with 8-Inch Sewer.	4	EA	850.00	3,400.00	1,100.00	4,400.00
c.	Remove Existing 10-Inch Diameter Sewer and Replace with 12-Inch Diameter PVC Pipe Sewer (0'-10'); including Bypass Pumping (if required), Excavation, Removal of Old Sewer Pipe, Standard Bedding, Installation of New Sewer Pipe including up to 8 -12" x 4" Tees, 4" PVC service laterals , Backfill of Trench from Top of Bedding to Base of Pavement (including Mineral Aggregate Base) per details, flowable fill (if	270	LF	210.00	56,700.00	265.00	71,550.00

				Chase Plumbing & Mechanical, Inc.		SAK Construction, LLC	
Item No.	Description	Estimated Qty.	Unit	Unit Price	Total Price	Unit Price	Total Price
	required),etc. for a complete installation (Strawberry Lane - Sheet 29). Existing Pavement Removal and Pavement Replacement Costs shall be included in Item 15.						
d.	Remove Existing 18-Inch Diameter Sewer and Replace with 24-Inch Diameter PVC Pipe Sewer (0'-12'); including Excavation, Removal of Old Sewer Pipe, Standard Bedding, Installation of New Sewer Pipe including 47 - 24" x 4" Tees, 4" PVC service laterals, Backfill of Trench from Top of Bedding to Base of Pavement (including Mineral Aggregate Base) per details, flowable fill (if required),etc. for a complete installation (Atlanta Drive - Sheets 36 & 37). Existing Pavement Removal and Pavement Replacement Costs shall be included in Item 15.	1625	LF	$ 348.00	$ 565,500.00	$ 435.00	$ 706,875.00
e.	Bypass Pumping System Necessary to Prepare and Install 24-inch Diameter PVC Pipe Sewer (Atlanta Drive - Sheets 36 & 37).	1	LS	5,000.00	5,000.00	6,300.00	6,300.00
9.	Sewer Replacement by Pipe Bursting						
a.	Replace Existing 8-Inch Gravity Sewer with 8-Inch HDPE Pipe Sewer in place, including Bypass Pumping, All Annulus Sealing Materials, Launching Pits, New Pipe, Backfill, etc. for a Complete Installation (Sheet 24). Existing Pavement Removal and Pavement Replacement Costs shall be included in Item 15.	800	LF	185.00	148,000.00	110.00	88,000.00
10.	Sewer CCTV Inspection						
a.	Pre-Installation - 48-Inch Sewer	2900	LF	4.00	11,600.00	7.00	20,300.00
b.	Post-Installation - 48-Inch Sewer	2900	LF	2.00	5,800.00	7.00	20,300.00
c.	Pre-Installation - 24-Inch Sewer	3000	LF	3.00	9,000.00	4.00	12,000.00
d.	Post-Installation - 24-Inch Sewer	3000	LF	2.00	6,000.00	4.00	12,000.00
e.	Pre-Installation - 15/16-Inch Sewer	1400	LF	2.00	2,800.00	3.00	4,200.00
f.	Post-Installation - 15/16-Inch Sewer	1400	LF	2.00	2,800.00	3.00	4,200.00
g.	Pre-Installation - 12-Inch Sewer	400	LF	2.00	800.00	3.00	1,200.00
h.	Post-Installation - 12-Inch Sewer	400	LF	2.00	800.00	3.00	1,200.00
i.	Pre-Installation - 10-Inch Sewer	1000	LF	2.00	2,000.00	3.00	3,000.00
j.	Post-Installation - 10-Inch Sewer	1000	LF	2.00	2,000.00	3.00	3,000.00
k.	Pre-Installation - 8-Inch Sewer	5800	LF	2.00	11,600.00	3.00	17,400.00
l.	Post-Installation - 8-Inch Sewer	5800	LF	2.00	11,600.00	3.00	17,400.00
m.	Pre-Installation - 6-Inch Sewer	50	LF	5.00	250.00	4.00	200.00
n.	Post-Installation - 6-Inch Sewer	50	LF	5.00	250.00	4.00	200.00
11.	Service Lateral Rehabilitation						
a.	Service Lateral Reinstatement by Coring and Brushing on 48-Inch Sewer	13	EA	136.00	1,768.00	1,000.00	13,000.00
b.	Service Lateral Reinstatement by Coring and Brushing on 24-Inch Sewer	10	EA	134.00	1,340.00	500.00	5,000.00
c.	Service Lateral Reinstatement by Coring and Brushing on 18-Inch Sewer	47	EA	61.00	2,867.00	300.00	14,100.00
d.	Service Lateral Reinstatement by Coring and Brushing on 15/16-Inch Sewer	4	EA	85.00	340.00	100.00	400.00
e.	Service Lateral Reinstatement by Coring and Brushing on 12-Inch Sewer	1	EA	85.00	85.00	100.00	100.00
f.	Service Lateral Reinstatement by Coring and Brushing on 8-Inch Sewer	48	EA	102.00	4,896.00	100.00	4,800.00

				Chase Plumbing & Mechanical, Inc.		SAK Construction, LLC	
Item No.	Description	Estimated Qty.	Unit	Unit Price	Total Price	Unit Price	Total Price
g.	Service Lateral Reinstatement with Electrofusion Saddle on 8-Inch Sewer	5	EA	$ 340.00	$ 1,700.00	$ 3,500.00	$ 17,500.00
h.	Trim Tap	4	EA	44.00	176.00	625.00	2,500.00
i.	Chemical Grout at 4" Lateral Connection	15	EA	290.00	4,350.00	1,300.00	19,500.00
j.	Chemical Grout at 6" Lateral Connection	4	EA	320.00	1,280.00	1,300.00	5,200.00
k.	Additional Sealing by Chemical Grout	20	GAL	150.00	3,000.00	125.00	2,500.00
l.	Sewer Lateral Repair CIPP (T-liner) at 4" Lateral Connection (from main 36 inches into lateral)	6	EA	6,380.00	38,280.00	8,200.00	49,200.00
12.	Manholes - Surface Rehabilitation						
a.	Replace Existing Frame and Cover with New Standard Frame and Cover	9	EA	1,100.00	9,900.00	900.00	8,100.00
b.	Replace Existing Frame and cover with New Watertight Frame and Cover	107	EA	1,500.00	160,500.00	1,600.00	171,200.00
c.	Reset Frame and Cover	59	EA	750.00	44,250.00	1,000.00	59,000.00
d.	Raise Frame	75	EA	700.00	52,500.00	700.00	52,500.00
e.	Seal Frame to Cone (up to 1 VF deep)	385	EA	425.00	163,625.00	300.00	115,500.00
f.	Seal Frame to Cone - Additional Depth (measured in 0.1 VF increments)	200	VF	231.00	46,200.00	150.00	30,000.00
13.	Manholes - Subsurface Rehabilitation						
a.	Seal Hole/Crack	444	EA	50.00	22,200.00	200.00	88,800.00
b.	Seal Pipe Connection	58	EA	42.00	2,436.00	210.00	12,180.00
c.	Seal Joint	28	EA	59.00	1,652.00	190.00	5,320.00
d.	Rebuild Bench and Invert in 4-Foot Diameter Manhole	10	EA	85.00	850.00	530.00	5,300.00
e.	Remove Roots	32	EA	44.00	1,408.00	230.00	7,360.00
f.	Cementitious Full Depth Lining in 4-foot-diameter Manhole	260	VF	110.00	28,600.00	200.00	52,000.00
14.	New and Replacement Precast Concrete Manholes, including Temporary Bypass Pumping (if required), Excavation, Precast Concrete Structures, Steps, Frames and Covers, Backfill, Compaction, Concrete Inverts, Connection of Existing and New Piping, Vacuum Testing, etc. for a Complete Installation (Atlanta Drive - Sheets 36 & 37).						
a.	4-Foot-Diameter Manhole, 0 to 6.0' Deep	5	EA	5,535.00	27,675.00	7,000.00	35,000.00
b.	Extra Riser, Over 6.0' Deep.	82	VF	200.00	16,400.00	250.00	20,500.00
15.	Pavement Removal and Replacement, including Traffic Control, Saw Cutting Existing Pavement, Removal and Disposal of Existing Pavement off-site, Placement of Pavement, compaction, etc. for a complete installation per the details on Sheet 94.						
a.	Temporary Pavement Repair	2,500	LF	35.00	87,500.00	45.00	112,500.00
b.	Completed Pavement Repair	2,500	LF	75.00	187,500.00	95.00	237,500.00
16.	Erosion and Sediment Controls						
a.	Tubes and Waddles or Silt Fence	375	LF	4.80	1,800.00	13.00	4,875.00
17.	Earth Work						
a.	Crushed Rock Bedding in Excess of Standard Bedding.	100	CY	50.00	5,000.00	63.00	6,300.00
18.	Cash Allowances						
a.	Soil, Concrete and Materials Testing	Allowance			7,000.00		7,000.00
b.	Cured In Place Pipe Testing Laboratory Services	Allowance			5,000.00		5,000.00
c.	Construction Verification Surveying	Allowance			2,500.00		2,500.00

Item No.	Description	Estimated Qty.	Unit	Chase Plumbing & Mechanical, Inc. Unit Price	Chase Plumbing & Mechanical, Inc. Total Price	SAK Construction, LLC Unit Price	SAK Construction, LLC Total Price
	*** ADDITIONAL WORK IF ORDERED BY THE ENGINEER ***						
19.	Manhole Inflow Dish Inserts	20	EA	$ 82.00	$ 1,640.00	$ 110.00	$ 2,200.00
20.	Concrete Encasement	50	CY	195.00	9,750.00	375.00	18,750.00
21.	Remove Protruding Service Lateral or Gasket						
a.	In 48-Inch Sewer	25	EA	540.00	13,500.00	500.00	12,500.00
b.	In 24-Inch Sewer	25	EA	540.00	13,500.00	450.00	11,250.00
c.	In 18-Inch Sewer	10	EA	440.00	4,400.00	350.00	3,500.00
d.	In 15/16-Inch Sewer	10	EA	440.00	4,400.00	350.00	3,500.00
e.	In 12-Inch Sewer	10	EA	435.00	4,350.00	350.00	3,500.00
f.	In 10-Inch Sewer	10	EA	435.00	4,350.00	350.00	3,500.00
g.	In 8-Inch Sewer	50	EA	430.00	21,500.00	300.00	15,000.00
h.	In 6-Inch Sewer	5	EA	430.00	2,150.00	400.00	2,000.00
22.	Trench Stabilization						
a.	Crushed Stone	500	CY	40.00	20,000.00	63.00	31,500.00
b.	Filter Fabric	1,000	SF	16.00	16,000.00	7.00	7,000.00
	TOTAL SCHEDULE A				**$4,769,299.50** [1] [2]		**$9,033,010.00** [5]
	SCHEDULE B - SEWER RELOCATION (SHEETS 90 & 91)						
1.	Abandonment of Existing Sewer Pipes at Manholes						
a.	Plug Ends of Existing Sewer Pipes to be abandoned at Manholes (Sheets 90 & 91).	12	EA	$ 750.00	$ 9,000.00	$ 950.00	$ 11,400.00
2.	Open Cut Sewer Replacement						
a.	Remove Existing 8-Inch Diameter Sewer and Replace with New 10-Inch Diameter DI Pipe Sewer (20'-25' depth of cut) from Sta. 0+00 to Sta. 1+00 (Sheet 90); including Bypass Pumping (if required), Excavation, Shoring, Standard Bedding, Installation of New Sewer Pipe, Backfill (including Select Backfill if required), Compaction, Final Grading and Cleanup, Seeding, Mulch, etc. for a complete installation.	100	LF	689.00	68,900.00	900.00	90,000.00
b.	Install New 10-inch Diameter PVC Pipe Sewer (10'-15' depth of cut) from Sta. 1+00 to Sta. 16+25 (Sheets 90 & 91); including Bypass Pumping (if required), Excavation, Trench Check Dams, Standard Bedding, Installation of New Sewer Pipe, Backfill (including Select Backfill), Compaction, Final Grading and Cleanup, Seeding, Mulch, etc. for a complete installation.	1,525	LF	215.00	327,875.00	270.00	411,750.00
c.	Remove Existing 8-Inch Diameter Sewer and Replace/Install New 10-Inch Diameter PVC Pipe Sewer (10'-15' depth of cut) in Cassandra Smith Road from Sta. 16+25 to Sta. 18+05 (Sheet 91); including Bypass Pumping (if required), Excavation, Removal of Old Sewer Pipe, Standard Bedding, Installation of New Sewer Pipe, Backfill of Trench from Top of Bedding to Base of Pavement (including Mineral Aggregate Base) per details, flowable fill (if required),etc. for a complete installation. Existing Pavement Removal and Pavement Replacement Costs shall be included in Item 5.	180	LF	340.00	61,200.00	425.00	76,500.00
d.	Connection of New 10-inch Diameter PVC Sewer Pipe to Existing Manhole S110D045 at	1	LS	3,500.00	3,500.00	4,400.00	4,400.00

Item No.	Description	Estimated Qty.	Unit	Chase Plumbing & Mechanical, Inc. Unit Price	Chase Plumbing & Mechanical, Inc. Total Price	SAK Construction, LLC Unit Price	SAK Construction, LLC Total Price
	Sta. 0+00.						
3.	Abandonment of Existing Manholes, complete including Removal of Frame, Cover, and Top Cone of Manhole, Backfill of Manhole with Crushed Stone (or Flowable Fill) until Flush with Ground Surface, etc.						
a.	Abandonment of Existing Manholes (Sheets 90 & 91)	5	EA	$ 1,200.00	$ 6,000.00	$ 1,500.00	$ 7,500.00
4.	New and Replacement Precast Concrete Manholes, including excavation, Temporary Bypass Pumping (if required), Excavation, Precast Concrete Structures, Steps, Frames and Covers, Backfill, Compaction, Concrete Inverts, Connection of Existing and New Piping, Vacuum Testing, etc. for a Complete Installation (Sheets 90 & 91).						
a.	4-Foot-Diameter Manhole, 0 to 6.0' Deep	6	EA	5,500.00	33,000.00	6,900.00	41,400.00
b.	Extra Riser, Over 6.0' Deep.	52	VF	20.00	1,040.00	25.00	1,300.00
c.	Manhole Ventilation Pipe	1	EA	2,700.00	2,700.00	3,400.00	3,400.00
d.	Drop Manhole Connections (MH 2 & MH 6 - Sheets 90 & 91)	2	EA	3,000.00	6,000.00	3,800.00	7,600.00
5.	Pavement Removal and Replacement, including Traffic Control, Saw Cutting Existing Pavement, Removal and Disposal of Existing Pavement off-site, Placement of Pavement, compaction, etc. for a complete installation per the details on Sheet 94.						
a.	Temporary Pavement Repair	180	LF	45.00	8,100.00	57.00	10,260.00
b.	Completed Pavement Repair	180	LF	90.00	16,200.00	115.00	20,700.00
6.	Erosion and Sediment Controls						
a.	Tubes and Waddles or Silt Fence	1825	LF	7.50	13,687.50	13.00	23,725.00
b.	Concrete Washout	1	LS	2,000.00	2,000.00	1,250.00	1,250.00
c.	Construction Entrance	1	LS	5,800.00	5,800.00	12,500.00	12,500.00
7.	Earth Work						
a.	Clearing and Grubbing (including trees less than 10 inch diameter)	3	AC	8,000.00	24,000.00	10,000.00	30,000.00
b.	Tree Removal (greater than 10" DBH) - per inch diameter DBH	400	IN	60.00	24,000.00	75.00	30,000.00
c.	Rock Excavation and Disposal (off site)	100	CY	200.00	20,000.00	250.00	25,000.00
d.	Crushed Rock Bedding in Excess of Standard Bedding.	100	CY	50.00	5,000.00	65.00	6,500.00
8.	Cash Allowances						
a.	Soil, Concrete and Materials Testing	Allowance			3,000.00		3,000.00
b.	Construction Verification Surveying	Allowance			2,500.00		2,500.00
	*** * * ADDITIONAL WORK IF ORDERED BY THE ENGINEER * * ***						
9.	Trench Stabilization						
a.	Crushed Stone	500	CY	40.00	20,000.00	63.00	31,500.00
b.	Filter Fabric	1000	SF	16.00	16,000.00	7.00	7,000.00
TOTAL SCHEDULE B - SEWER RELOCATION (SHEETS 90 & 91)					**$679,502.50**		**859,185.00**
TOTAL SCHEDULES A + B					**$5,448,802.00** [1] [2]		**$9,892,195.00**

[1] Chase Plumbing & Mechanical. Schedule A, Item No. 1.c: Math error corrected.
[2[Chase Plumbing & Mechanical. Schedule A, Item No. 1.d: Math error corrected.
[3] SAK Construction. Schedule A, Item No. 3.d: Math error corrected.
[4] SAK Construction. Schedule A, Item No. 5.c: Math error corrected.
[5] SAK Construction. Schedule A Total did not change.