PROPOSAL SUBMITTED BY:		
CORE AND MA	in LP	
Contractor's Name		
220 S. WES	TGATE DRIV	E
Street		P.O. Box
CAROL STREAM	1	<u>Le0188</u>
City	State	Zip Code
		*



CITY OF AURORA KANE COUNTY STATE OF ILLINOIS

Request for Quotations For

2021 Water & Sewer Division Materials and Supplies Bid 20-49

PROPOSALS DUE October 28, 2020

PREPARED BY CITY OF AURORA DIVISION of ENGINEERING 77 S. BROADWAY AVENUE AURORA, ILLINOIS 60505

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City of Aurora Bid 20-49 NOTICE TO BIDDERS

Sealed quotations for the materials and supplies described below will be received at the office of Purchasing, 44 E. Downer Place, Aurora, IL 60507 until 2:00 o'clock P.M., October 28, 2020. Quotes will not be opened publicly.

Description of Work

Name: 2021 Water & Sewer Division Materials and Supplies

<u>Proposed Improvement:</u> The City of Aurora is requesting quotations for the anticipated purchase of certain materials and supplies to be used by the Water & Sewer Maintenance Division during 2021.

Bidders Instructions:

- 1. Specifications and other pertinent documents may be obtained online at https://www.aurora-il.org/bids.aspx.
- 2. The City of Aurora reserves the right to reject any or all of the bids and to waive any and all irregularities and technicalities whenever such rejection is in the best interest of the City of Aurora.
- 3. All bid items will be evaluated separately and the supplier for each bid item will be chosen based on cost and availability of the item at the time of need.
- 4. Minority Participation: The City of Aurora encourages minority business firms to submit proposals and encourages successful contract bidder to utilize minority businesses as subcontractors for supplies, equipment, services and construction.
- 5. Any bidder who owes the City money may be disqualified at the City's discretion.
- 6. The City of Aurora has a local preference ordinance that would apply to this contract.

By Order of City Clerk City of Aurora

PROPOSAL

TO: THE OFFICE OF THE CITY CLERK CITY OF AURORA 44 EAST DOWNER PLACE AURORA, ILLINOIS 60507

- 1. Proposal of CORE AND MAN LP for the improvement known as the 2021 Water & Sewer Division Materials and Supplies, Bid 20-49.
- 2. The plans and specifications for the proposed improvements are those prepared by the City of Aurora Engineering Division and approved by the City Council of Aurora, Illinois.
- In submitting this proposal, the undersigned declares that the only persons or parties interested in the proposal as principals are those named herein, and that the proposal is made without collusion with any person, firm, or corporation.
- 4. The undersigned further declares that he has carefully examined the proposals, plans, specifications, form of contract, and special provisions, if any, and that he has inspected in detail the site of the proposed work and that he has familiarized himself with all of the local conditions affecting the contract and detailed requirements of construction, and understands that in making this proposal he waives all right to plead any misunderstanding regarding the
- 5. The undersigned declares that he understands that the quantities mentioned are approximate only, and that they are subject to increase or decrease; that he will take in full payment therefore the amount of the summation of the actual quantities, as finally determined, multiplied by the unit prices shown in the schedule of prices contained herein.
- 6. The undersigned agrees that the unit prices submitted herewith are for the purpose of obtaining a gross sum and for use in computing the value of extras and deductions; that if the quantities multiplied by their respective unit prices, the latter shall apply.
- 7. The undersigned agrees that if the City decides to extend or shorten the improvement, or otherwise alter it by extras or deductions, including the elimination of any one or more of the items, as provided in the specifications, he will perform the work as altered, increased or items eliminated by the City of Aurora.
- 8. The undersigned agrees that the Engineer may, at any time during the progress of the work covered by this contract, order other work or materials incidental thereto, and that all such work and materials as do not appear in the proposal or contract as a specific item accompanied by a unit price, and which are not included under the bid price for other items in the contract, shall be performed as extra work, and that he will accept as full compensation for in the specifications.
- 9. The undersigned submits herewith his schedule of prices covering the work to be performed under this contract, he understands that he must show in the schedule the unit prices for which

he proposes to perform each item of work, that the extensions must be made by him, and that if not so done, his proposal may be rejected as irregular or non-responsive.

- 10. The City of Aurora reserves the right to reject any or all of the bids and to waive any and all irregularities and technicalities. The City of Aurora shall either award the project or reject the bids within Sixty (60) calendar days after the bid opening. This time frame may be extended upon mutual agreement of the City and the Bidder.
- 11. The undersigned of this proposal agrees that he or she has examined all sections of this Proposal, Specifications, and Bidding Documents and hereby understands and accepts the provisions for access, or the lack of access, to the construction site and shall claim no compensation other than the prices as bid for this condition of accessibility.
- 12. The undersigned agrees to indemnifying and saving harmless the City of Aurora, its officers, agents, employees, and servants by filing with the City, prior to the execution of the contract, copies of completed Certificates of Insurance satisfactory to the City, with the City of Aurora named as primary, non-contributory additional insured; automobile liability insurance covering owned, non-owned, and hired vehicles with limits of liability as stated in the attached Special Provisions.
- 13. No contract will be awarded to any bidder where that bidder or any principal or supervisory personnel of the bidder has been personally involved with another business that has been supervisory personnel of the bidder has been personally involved with another business that is a defaulter as surety or otherwise upon obligation to the City.
- 14. The entire set of specifications shall be submitted with each proposal.
- 15. The City has the right to terminate this Contract, in whole or in part, for any reason or if sufficient funds have not been appropriated to cover the estimated requirement of the Services date. On the date specified, this Contract will end. If this Contract is terminated by the City, as provided herein, the City shall pay the Bidder only for services performed up the date of City based upon this Contract and any payment so made to the Bidder upon termination shall unfinished documents, studies and reports and shall become the property of the City.
- 16. The City of Aurora has a local preference ordinance that would apply to this contract. O18-070 approved August 28, 2018 defines "Local business" to mean a the corporate boundaries of the City of Aurora at least twelve months prior to a bid or proposal opening date, from which the vendor, contractor or consultant operates or performs must disclose the percentage of workforce in the City of Aurora; be registered with the current with property tax payments and sales tax payments; not have any outside cited qualified and trained staff to service the bid of interest.
- 17. The undersigned submits herewith this **Schedule of Prices** covering the materials requested under this contract:



Signatures

	Signature of Bidder————Business Address	
(Ifa partrership)		
	Frm Name CORE AND	S MALLIA
	Signed by	
	Business Address 220 S.	WESTGATE DR
	CAROLS	STREAM IL 60188
	Insert Names and Addresses of All Partner's	LAIR CEO
f a corporation)		
,,	Corporate Name	
	Corporate Name	
	Business Address	President
	President	
	Secretary ————	
	Th., 20	
ttest: ———		



RETURN WITH BID

	<u>ITEM</u> Hydrants & Related Parts	UNIT	UNIT COST
1	Waterous Fire Hydrant Assembly, 4 1/2' Bury		
2	Waterous Fire Hydrant Assembly, 5' Bury	EA	2475
3		EA	2594
4	Waterous Fire Hydrant Assembly, 5 1/2' Bury	EA	2650
5	Waterous Fire Hydrant Assembly, 6' Bury	EA	2715
6	Waterous Fire Hydrant Assembly, 4 1/2' Bury w/Alpha Standard Base	EA	2535
	Waterous Fire Hydrant Assembly, 5' Bury w/Alpha Standard Base	EA	2650
7	Waterous Fire Hydrant Assembly, 5 1/2' Bury w/Alpha Standard Base	EA	2100
8	Waterous Fire Hydrant Assembly, 6' Bury w/Alpha Standard Base	EA	2739
-	Waterous Fire Hydrant Assembly, 4 1/2' Bury w/Alpha XL Base	EA	2535
-	Waterous Fire Hydrant Assembly, 5' Bury w/Alpha XL Base	EA	2650
	Waterous Fire Hydrant Assembly, 5 1/2' Bury w/Alpha XL Base	EA	2700
- 1	Naterous Fire Hydrant Assembly, 6' Bury w/Alpha XL Base	EA	2739
	Naterous Fire Hydrant Extension, 6"	EA	523
	Vaterous Fire Hydrant Extension, 12"	EA	615
	Vaterous Fire Hydrant Extension, 18"	EA	680
.6 V	Vaterous Fire Hydrant Extension, 24"	EA	810
7 V	Vaterous Traffic Kit, Old Style (K525/10")	EA	295
8 V	/aterous Traffic Kit, New Style (KS28/16")	EA	240
9 W	aterous Hydrant Kit K834, Hydrant Head w/Traffic Kit	EA	
o w	aterous Hydrant Kit K836, Hydrant Head	EA	1340
1 W	aterous Hydrant Part #60 (Hydrant Head)	EA	
2 Ro	Don Hydra-Finder Hydrant Marker, 60"	EA	565
Va	lve Seat - #31	EA	18
М	ain Valve Rubber #35	EA	207
Br	eakable Flange #113	EA	68
Fla	nge Lock Ring #64	EA	56
Co	upling Sleeve (2 halves) #67	EA	8.40
Lov	ver Operating Nut #17A		26
Dra	in Plunger #7	EA	37
		EA	18



RETURN WITH BID

NO. ITEM	UNIT	UNIT COST
30 Nozzle - Hose #12	EA	117
31 Nozzle - Pumper #12	EA	331
32 Cap Gasket Hose #11	EA	7
33 Cap Gasket Pumper #11	EA	10
34 Nozzle Cap Hose #10	EA	100
35 Nozzle Cap Pumper #10	EA	
36 O-Ring (Hose Nozzle) 3-1/4 X 3-5/8 #118	EA	169
O-Ring (Pumper Nozzle) 5-1/4 X 5-5/8 #116	EA	10
Hose Nozzle Retainer #119	EA	
39 Pumper Nozzle Retainer #117	EA	23
40 Cap Gasket - Pumper #11	EA	31
11 Cap Gasket- Hose #11	EA	7
12 Nozzle Cap - Pumper #10		10
Brass Lock Nuts #87	EA	149
T-Bolts and Nuts (Per Case)	EA	5
5 High Performance Grease for Food Processing Equipment (5 Gal)	EA	210
6 Mineral Oil Lubricant (6-1/2 Oz)	EA	160
alves and Related Parts	EA	24
7 Clow Cutting in Valve, 2"	EA	1/2
8 Clow Cutting in Valve, 4"	EA	N13
Clow Cutting in Valve, 6"	EA	
Clow Cutting in Valve, 8"		
Clow Cutting in Valve, 10"	EA	
Clow Cutting in Valve, 12"	EA	
American Flow Control Gate Valve, 2" w/ Mechanical Joint Ends	EA	-
American Flow Control Gate Valve, 4" w/ Mechanical Joint Ends	EA	315
American Flow Control Gate Valve, 6" w/ Mechanical Joint Ends	EA	440
American Flow Control Gate Valve, 8" w/ Mechanical Joint Ends	EA	565
American Flow Control Gate Valve, 10" w/ Mechanical Joint Ends	EA	895
w/ Mechanical Joint Ends	EA	1400



RETURN WITH BID

7.	ITEM	UNIT	UNIT COST
58	American Flow Control Gate Valve, 12" w/ Mechanical Joint Ends	EA	1765
59	American Flow Control Gate Valve, 14" w/ Mechanical Joint Ends	EA	5575
60	American Flow Control Gate Valve, 16" w/ Mechanical Joint Ends	EA	5575
61	American Flow Control Gate Valve, 2" w/ ALPHA Standard Restrained Joint Ends	EA	NB
62	American Flow Control Gate Valve, 4" w/ ALPHA Standard Restrained Joint Ends	EA	
63	American Flow Control Gate Valve, 6" w/ ALPHA Standard Restrained Joint Ends	EA	525
64	American Flow Control Gate Valve, 8" w/ ALPHA Standard Restrained Joint Ends	EA	670
65	American Flow Control Gate Valve, 10" w/ ALPHA Standard Restrained Joint Ends	EA	1045
-	American Flow Control Gate Valve, 12" w/ ALPHA Standard Restrained Joint Ends	EA	1595
	American Flow Control Gate Valve, 14" w/ ALPHA Standard Restrained Joint Ends	EA	2005 NB
68	American Flow Control Gate Valve, 16" w/ ALPHA Standard Restrained Joint Ends	EA	NIB
9	American Flow Control Gate Valve, 2" w/ ALPHA XL Restrained Joint Ends	EA	NB
0 4	American Flow Control Gate Valve, 4" w/ ALPHA XL Restrained Joint Ends	EA	525
1 /	American Flow Control Gate Valve, 6" w/ ALPHA XL Restrained Joint Ends	EA	670
2 A	merican Flow Control Gate Valve, 8" w/ ALPHA XL Restrained Joint Ends	EA	1045
3 A	merican Flow Control Gate Valve, 10" w/ ALPHA XL Restrained Joint Ends	EA	1595
4 A	merican Flow Control Gate Valve, 12" w/ ALPHA XL Restrained Joint Ends	EA	2005
5 A	merican Flow Control Gate Valve, 14" w/ ALPHA XL Restrained Joint Ends	EA	NB
6 A	merican Flow Control Gate Valve, 16" w/ ALPHA XL Restrained Joint Ends	EA	N 13
Ty	/ler Valve Box, 664-S Complete w/Lid	EA	180
Ту	ler Valve Box Extension, #58-A	EA	49
Ту	ler Valve Box Extension, #59-A	EA	
Ту	ler Valve Box Extension, #60-A	EA	63
Ту	ler Valve Box Extension, #69A - 9"	EA	64
Ту	ler Valve Box Extension, #69A - 18" (Foreign OK)	EA	52
Tyl	er Valve Box Extension, #69A - 24" (Foreign OK)	EA	36 40



RETURN WITH BID

NO. ITEM Repair Parts ar	d Eisting	UNIT	UNIT COST
			9111 0031
	ar Mission Coupling (Clay to Plastic)	EA	23
	ar Mission Coupling (Clay to Plastic)	EA	39
and the second second	ar Mission Coupling (Clay to Plastic)	EA	45
3.51	ear Mission Coupling (Clay to Plastic)	EA	5 7
	ear Mission Coupling (Clay to Plastic)	EA	71
The second second second	ear Mission Coupling (Clay to Plastic)	EA	
90 4" Non-Shea	r Mission Coupling (Plastic to Plastic)	EA	134
91 6" Non-Shea	r Mission Coupling (Plastic to Plastic)	EA	16
92 8" Non-Shea	r Mission Coupling (Plastic to Plastic)	EA	30
93 10" Non-She	ar Mission Coupling (Plastic to Plastic)	EA	45
12" Non-She	ar Mission Coupling (Plastic to Plastic)	EA	77
5 15" Non-Shea	or Mission Coupling (Plastic to Plastic)	EA	71
6 2" x 8" Repai	Clamp	EA	121
7 4" x 8" Repair	Clamp		39
8 6" x 8" Repair	Clamp	EA	50
6" x 8" Repair	Clamp w/ 3/4" Tap	EA	58
	Clamp w/ 1" Tap	EA	79
1 6" x 10" Repai		EA	79
2 6" x 12" Repai		EA	79
6" x 16" Repair		EA	92,
6" x 36" Repair		EA	102
8" x 8" Repair (EA	470
	Elamp w/ 3/4" Tap	EA	68
8" x 8" Repair C		EA	90
8" x 10" Repair		EA	90
8" x 12" Repair		EA	90
		EA	109
8" x 16" Repair		EA	125
8" x 36" Repair (Clamp	EA	500



(For complete information covering these items, see specifications)

RETURN WITH BID

	. ITEM	UNIT	UNIT COST
	2 10" x 10" Repair Clamp	EA	
	10" x 12" Repair Clamp	EÁ	116
	12" x 12" Repair Clamp	EA	138
	12" x 16" Repair Clamp		167
116	12" x 36" Repair Clamp	EA	190
117	4" Tyler Cut in Sleeve	EA	745
118	6" Tyler Cut in Sleeve	EA	441
119	8" Tyler Cut in Sleeve	EA	561
120	10" Tyler Cut in Sleeve	EA	762
121	12" Tyler Cut in Sleeve	EA	1056
	4" Full Body MJ Ductile Iron Solid Sleeve	EA	1260
	" Full Body MJ Ductile Iron Solid Sleeve	EA	145
	" Full Body MJ Ductile Iron Solid Sleeve	EA	191
	0" Full Body MJ Ductile Iron Solid Sleeve	EA	246
	2" Full Body MJ Ductile Iron Solid Sleeve	EA	356
	4" Full Body MJ Ductile Iron Solid Sleeve	EA	469
		EA	1200
	" Full Body MJ Ductile Iron Solid Sleeve Cast Couplings	EA	1498
		EA	47
_	Cast Couplings	EA	
	Cast Couplings	EA	100
_	Cast Couplings	EA	116
_	Cast Couplings	EA	146
_	Cast Couplings	EA	192
	Cast Couplings		236
16"	Cast Couplings	EA	380
2" S	ingle Bolt Standard Cast Couplings	EA	506
4" S	ingle Bolt Standard Cast Couplings	EA	101
	ngle Bolt Standard Cast Couplings	EA	171
	ngle Bolt Standard Cast Couplings	EA	226
		EA	755



RETURN WITH BID

NO.	ITEM	UNIT	UNIT COST
-	10" Single Bolt Standard Cast Couplings	EA	328
	12" Single Bolt Standard Cast Couplings	EA	386
	14" Single Bolt Standard Cast Couplings	EA	1046
	16" Single Bolt Standard Cast Couplings	EA	1080
	2" Single Bolt XL Cast Couplings	EA	NIB
	4" Single Bolt XL Cast Couplings	EA	5
	6" Single Bolt XL Cast Couplings	EA	
148	8" Single Bolt XL Cast Couplings	EA	
149	10" Single Bolt XL Cast Couplings	EA	
150	12" Single Bolt XL Cast Couplings	EA	
151 1	4" Single Bolt XL Cast Couplings	EA	
152 1	.6" Single Bolt XL Cast Couplings	EA	
53 2	" Single Bolt Transition Cast Couplings	EA	7
54 4	" Single Bolt Transition Cast Couplings	EA	
55 6	" Single Bolt Transition Cast Couplings	EA	
56 8	" Single Bolt Transition Cast Couplings	EA	
57 10	O" Single Bolt Transition Cast Couplings	EA	
58 12	2" Single Bolt Transition Cast Couplings	EA	
59 14	" Single Bolt Transition Cast Couplings	EA	
0 16	" Single Bolt Transition Cast Couplings	EA	
1 4"	Megalug Restraint for Ductile Iron Pipe	ÉA	13
2 4"	Megalug Restraint for PVC Pipe	EA	18
3 6"	Megalug Restraint for Ductile Iron Pipe	EA	23
4 6"	Megalug Restraint for PVC Pipe	EA	21.50
5 8"	Megalug Restraint for Ductile Iron Pipe	EA	33
8"	Megalug Restraint for PVC Pipe	EA	
10"	Megalug Restraint for Ductile Iron Pipe		40
7 7 7	Megalug Restraint for PVC Pipe	EA	49
	Megalug Restraint for Ductile Iron Pipe	EA EA	76



RETURN WITH BID

	<u>ITEM</u>	UNIT	UNIT COST
	12" Megalug Restraint for PVC Pipe	EA	80
	2" Tyler Mechanical Joint Accessory Kit	EA	18
	4" Tyler Mechanical Joint Accessory Kit	EA	35
	5" Tyler Mechanical Joint Accessory Kit	EA	46
	" Tyler Mechanical Joint Accessory Kit	EA	59
175 1	.0" Tyler Mechanical Joint Accessory Kit	EA	82
176 1	2" Tyler Mechanical Joint Accessory Kit	EA	
177 4	" Ductile Iron Tyler Bored Out Flange	EA	106
178 6	" Ductile Iron Tyler Bored Out Flange	EA	36
179 8	Ductile Iron Tyler Bored Out Flange	EA	42
80 10	0" Ductile Iron Tyler Bored Out Flange	EA	55 70
.81 12	2" Ductile Iron Tyler Bored Out Flange	EA	
	main Pipe Items		92
	CL 52 Ductile Iron Pipe, 18'	EA	432
_	CL 52 Ductile Iron Pipe, 🎉 てらい	EA	370
	CL 52 Ductile Iron Pipe, 1	EA	520
	"CL 52 Ductile Iron Pipe, 190"	EA	680
	CL 52 Ductile Iron Pipe, 18 20	EA	860
_	CL 52 Ductile Iron Pipe, 194 ZO	EA	
	ervice Related Items		1240
_	" Flared Corporation Stop	EA	29
	lared Corporation Stop	EA	45
	/2" Flared Corporation Stop	EA	122
_	lared Corporation Stop	EA	224
	Full Port Flared Curb Box	EA	71
	ull Port Flared Curb Box	EA	95
_	2" Full Port Flared Curb Box	EA	215
	all Port Flared Curb Box	EA	349
	" Curb Box	EA	40
1 1/2	" Curb Box	EA	54



(For complete information covering these items, see specifications)

RETURN WITH BID

198	1 1/4" Curb Box Top	UNIT	
		EA	UNIT COST
200	Curb Box Extension Replacement Slip Sleeve		8.50
	3/4" Type K Copper - 60' Roll	EA	12
	3/4" Type K Copper - 100' Roll	EA	210
	1" Type K Copper - 60' Roll	EA	350
	1" Type K Copper - 100' Roll	EA	279
	1 1/2" Type K Copper - 60' Roll	EA	465
205 1	1/2" Type K Copper - 100' Roll	EA	435
	" Type K Copper - 40' Roll	EA	72.5
207 2'	"Type K Copper - 60' Roll	EA	460
208 3/	4" Copper to 3/4" Copper Coupling	EA	690
209 3/4	4" Copper to 1" Copper Coupling	EA	16
210 1"	Copper to 1" Copper Coupling	EA	24
211 3/4	" Copper to 3/4" Strong Lead-Pack Coupling	EA	28
212 3/4	" Copper to 3/4" Extra Strong Lead-Pack Coupling	EA	29
13 3/4	" Copper to 3/4" Double Extra Strong Lead-Pack Coupling	EA	34
14 1" C	opper to 3/4" Strong Lead-Pack Coupling	EA	40
15 1" Co	opper to 3/4" Extra Strong Lead-Pack Coupling	EA	51
16 1" Co	opper to 1" Strong Lead-Pack Coupling	EA	
7 1" Co	opper to 1" Extra Strong Lead-Pack Coupling	EA	49
8 1" Co	pper to 1" Double Extra Strong Lead-Pack Coupling	EA	40
ter Iter	ns	EA	43
3/4" F	ord Meter Horn		54
1" Fore	d Meter Horn	EA	64
	ord Ball Valve (Check Specifications)	EA	108
1" Ford	Ball Valve (Check Specifications)	EA	51
5/8" x 1	1/2" Pipe Thread Ford Meter Coupling	EA	87
5/8" x 3	3/4" Pipe Thread Ford Meter Coupling	Pkg	440
3/4" For	rd Meter Coupling	Pkg	
	25	Pkg	525 262



RETURN WITH BID

NO. ITEM	UNIT	UNIT COST
226 1" Ford Meter Coupling	5 Pkg	242
227 1 1/2" Large Bronze Meter Flange Kit	EA	70
228 2" Large Bronze Meter Flange Kit	EA	75
229 3" Large Bronze Meter Flange Kit	EA	203
230 4" Large Bronze Meter Flange Kit	EA	310
231 3" Zenner FHZ30S Hydrant Meter w/Check Valve	EA	NB
232 Ground clamp, 1 1/2"	EA	3.00
Storm Sewer Items		2.00
233 Manhole Frame & Solid Lid, 4", R-1647-B	EA	NIB
234 Manhole Frame & Solid Lid, 7", R-1772-B	EA	7015
Manhole Frame & Solid Lid, 9", R-1713-B	EA	
Combination Inlet Frame, Grate, & Curb Box, R-3015-R	EA	
Beehive Grate, R-4340-B	EA	
38 Beehive Grate, R-4341-A	EA	
39 Beehive Grate, R-4342	EA	
40 Solid Cover R-1712	EA	
41 Open Cover R-2502, Type D	EA	
42 Curb Box - R-3015	EA	
Curb Frame R-3015	EA	
44 Grate - R-3015	EA	
5 Inlet Filter for IDOT Type 1 Frame		*
6 Inlet Filter for IDOT Type 8 Frame	EA	95
7 Inlet Filter for IDOT Type 23 Frame	EA	- 95
8 Concrete Adjusting Ring, 2"	EA	115
Concrete Adjusting Ring, 3"	EA	21
Concrete Adjusting Ring, 4"	EA	27
Concrete Adjusting Ring, 6"	EA	34
	EA	38
HDPE Adjusting Ring, 3/4" x 1-1/2"	EA	26
Composite Adjusting Ring, 0.75"	EA	29.40



(For complete information covering these items, see specifications)

RETURN WITH BID

	D. ITEM	UNIT	UNIT COST
	4 Composite Adjusting Ring, 1"	EA	33
	Composite Adjusting Ring, 1.25"	EA	38.25
	Composite Adjusting Ring, 1.5"	EA	43.50
257	The respecting filling, 1.75	EA	47.10
258	Positio Majusting King, 2	EA	52.50
259	, see the stand time, 2.23	EA	57.80
1	Composite Adjusting Ring, 2.5"	EA	62-25
	Composite Adjusting Ring, 4"	EA	90.75
	Composite Adjusting Ring, 6"	EA	126.25
	M-1 Structural Adhesive/Sealant	EA	16
264	2' x 24" Catch Basin with Base	EA	
265	2' x 30" Catch Basin with Base	EA	NIB
266	2' x 36" Catch Basin with Base	EA	
267	2' x 48" Catch Basin with Base		
268	3' x 36" Catch Basin with Base	EA	
69	3' x 16" Barrell Section	EA	
70 3	3' x 24" Barrell Section	EA	
	' x 36" Barrell Section	EA	
-	'x 48" Barrel Section	EA	
-	x 18" Cone Offset	EA	
+		EA	
	Flat Top Eccentric Opening, Non-Tongue and groove	EA	
	Flat Top Concentric Opening, Non-Tongue and groove	EA	
-	Flat Top Eccentric Opening, Tongue and Groove	EA	
	Flat Top Concentric Opening, Tongue and groove	EA	
	Diameter Base	EA	
	Flat Top, 6" Thickness, Concentric Opening, Tongue and Groove	EA	
4'1	Flat Top, 6" Thickness Eccentric Opening Tongue and Groove	EA	
4' F	Flat Top, 6" Thickness, Concentric Opening, Non-Tongue and Groove	EA	



RETURN WITH BID

	ITEM	UNIT	UNIT COST
282	4' Flat Top, 6" Thickness Eccentric Opening Non-Tongue and Groove	EA	11B
283	4' Flat Top, 12" Thickness, Concentric Tongue and Groove	EA	1
284	4' Flat Top, 12" Thickness, Eccentric Tongue and Groove	EA	
285	4' Flat Top, 12" Thickness, Concentric Non-Tongue and groove	EA	
286	4' Flat Top, 12" Thickness, Eccentric Non-Tongue and groove	EA	
287	4' x 32" Manhole with Base	EA	
288	4' x 48" Barrel Section	EA	
289	4' Base	EA	
290	5' Flat Top, 6" Thickness, Concentric Opening, Tongue and Groove	EA	
291	5' Flat Top, 6" Thickness Eccentric Opening Tongue and Groove	EA	
	Flat Top, 6" Thickness, Concentric Opening, Non-Tongue and Groove	EA	
	Flat Top, 6" Thickness Eccentric Opening Non-Tongue and Groove	EA	
	Flat Top, 12" Thickness, Concentric Tongue and Groove	EA	
	Flat Top, 12" Thickness, Eccentric Tongue and Groove	EA	
96 5	Flat Top, 12" Thickness, Concentric Non-Tongue and groove	EA	
	Flat Top, 12" Thickness, Eccentric Non-Tongue and groove	EA	
	x 32" Manhole with Base	EA	
9 5'	x 48" Barrel Section	EA	
0 5'	Base	EA	
1 12	" Diameter ADS N-12 (Water Tight Joints, 20' Sticks)	EA	10.0
	" Diameter ADS N-12 (Water Tight Joints, 20' Sticks)	EA	105
	" Diameter RCP	EA	146.40
4 15	" Diameter RCP	EA	NIB
18	Diameter RCP	EA	
24'	Diameter RCP	EA	
12"	Diameter RCP Flared End Section	EA.	



RETURN WITH BID

NC		UNIT	UNIT COST
30	8 15" Diameter RCP Flared End Section w/Grate	EA	N 183
30	9 18" Diameter RCP Flared End Section w/Grate	EA	1010
310	24" Diameter RCP Flared End Section w/Grate	EA	
San	nitary Sewer Items		<u></u>
311	Sanitary Manhole Chimney Seals	EA	160
312	4" SDR-26 PVC Pipe, 14'	EA	150.00
313	6" SDR-26 PVC Pipe, 14'	EA	20.44
314	8" SDR-26 PVC Pipe, 14'	EA	44.80
315	10" SDR-26 PVC Pipe, 14'	EA	80.50
316	12" SDR-26 PVC Pipe, 14'	EA	126.00
317	15" SDR-26 PVC Pipe, 14'	EA	179.90
18	18" SDR-26 PVC Pipe, 14'	EA	272.30
1isc	ellaneous Items	EA	378.00
19	Krylon Industrial Quik-Mark Blue Marking Paint, 17 Oz		
	Krylon Industrial Quik-Mark Green Marking Paint, 17 Oz	EA	2.50
- 1	Krylon Industrial Quik-Mark White Marking Paint, 17 Oz	EA	2.50
- 1	Hydraulic Cement, 50 LB Pail	EA	2.50
-+	Masonary Mortar Type M, 80lb Bag	EA	<u>58</u>
\neg	Butyl Rubber Sealant Tape, 3/8"x3"x50'	EA	9
_	Butyl Rubber Sealant Tape, 3/8"x6"x50'	Roll	NIB
_	Butyl Rubber Sealant Tape, 3/8"x9"x50'	Roll	
_	Butyl Rubber Sealant Tape, 3/8"x12"x50'	Roll	
_	Butyl Rubber Sealant, 3/8"x3.5"x16'	Roll	
_		Roll	
7	Butyl Rubber Sealant, 3/4"x3/4"x16"	Roll	
O T	ype II Barricade	EA	

BIDDER'S CERTIFICATION



I/We hereby certify that:

- A. A complete set of bid papers as intended have been received and that I/We will abide by the contents and/or information received and/or contained therein.
- B. I/We have not entered into any collusion or other unethical practices with any other person, firm, or employee of the City, which would in any way be construed as an unethical practice.
- C. I/We comply with all current Federal, State, and Local laws, statutes, rules, and regulations referencing equal opportunity employment practices.
- D. I/We will abide by all codes, rules, regulations, ordinances, and statutes of the City of Aurora, Counties of Kane, DuPage, as applicable and the State of Illinois and the United States of America.
- E. I/We hereby certify that we have adopted a written sexual harassment policy which is in accordance with the requirements set forth in 775 ILCS 5/2-105(A)(4) and further certify that I/We are also in compliance with all other requirements contained in 775 ILCS 5/2-105(A).

F. I/We have in place a:

✓ written program which meets or exceeds the program requirements of the Substance abuse Prevention on Public Works Projects Act (Public Act 95-0635), and will provide a written copy thereof to the City of Aurora or

□ collective bargaining agreement which deals with the subject matter of the Substance Abuse Prevention on Public Works Projects Act (Public Act 95-0635) — Contractor shall check the box for the policy that applies.

CORE AND MA	NLP
Company Name	
ZZO S. WESTGA	TE DR. CAROL STREAM IL 60188
Address	
KEITH LAW	RENCE
Name of Corporate or Company Official (print)	
Authorized Signature	Branch MANAGER
Date 10 28 20	Phone_ 630-665-1800

Certification Regarding Debarment, Suspension and Other Responsibility Matters

The prospective participant to the best of its knowledge and belief that it and its principles:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in fine of up to \$10,000 or imprisonment for up to 5 years, or both.

(Signature of Authorized Representative) (Date)

I am unable to certify the above statements. My explanation is attached.

EPA FORM 5700-49 (11-88)

Bidder Certification In Compliance with Article 33E to the "Criminal Code of 1961"

1- KEITH LAURE (Name)	, do hereby certify that:
1. I am_ BRANCH MANACE and have authority to execute this ce	ertification on behalf of the firm
 This firm is not barred from bidding o Section33E-3, Bid-rigging, or Section the "Criminal Code of 1961." 	n this contract as a result of a violation of 33E-4, Bid Rotating, as set forth in Article 33E to
Name of Firm_ CORE AND MA	IN, LA
Signature_ hull	
Title BRANCH MANAGE	
Date	
On this JBTH day of OCTOBEL duly sworn, did execute the foregoing affidavir authorized by (Name of Firm) CORL Avand did so as his or her free act and deed.	2020, before me appeared (Name) to me personally known, who, being t, and did state that he or she was properly to execute the affidavit
Notary Public _	Commission Expires
Notary Seal	
	OFFICIAL SEAL

CRAIG CHRISTENSEN
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES OCT. 05, 2023

SPECIAL PROVISIONS

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CITY OF AURORA SPECIAL PROVISIONS

The following Special Provisions supplement the "General Specifications," the Illinois Department of Transportation's "Standard Specifications For Road and Bridge Construction," (herein after called the "Standard Specifications", the City of Aurora's "Standard Specifications for Improvements," the "Supplemental Specifications and Recurring Special Provisions," the "Standard Specifications for Water And Sewer Main Construction in Illinois, Sixth Edition," the "Standard Specifications for Traffic Control Items," and the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways" in effect on the date of invitation for proposals. These special provisions apply to and govern the Water & Sewer Maintenance Division 2021 Materials and Supplies Request for Quotations and in case of conflict with any part or parts of said specifications; these Special Provisions shall take precedence and shall

All appropriate parts shall be lead free and be stamped "NL". Materials are to be manufactured in the United States. Any variation from the special provisions below should be approved

All materials shall be delivered to the Water & Sewer Maintenance Division within 5

SP1-FIRE HYDRANT ASSEMBLY

These specifications are to be used in conjunction with the AWWA Standard C502 for fire hydrants for ordinary water works service, and the City of Aurora's Standard Specifications for

All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502.

The hydrant shall be Waterous Pacer WB-67 (5 1/4" barrel) of a pattern approved by the Engineer. The seat must be bronze. The name or mark of the manufacturer, size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the

Hydrant markers shall be RoDon Hydra-Finder Hydrant Markers or an engineer approved equal. The marker shall be a 3/8" diameter white laminar matrix fiberglass shaft with 6" wide high reflectivity red striping tape. The hydrant marker shall have a standard length of 5'. The fiberglass shaft shall be attached to a heavy duty MIL SPEC chrome-plated spring mount connected to a

See the Figure 6 attached at the end for a diagram showing the specific hydrant replacement

The ALPHA restraint joint shall have a working pressure of 350 psi and be as licensed and

SP 2 - HYDRANT METER

The Hydrant Meter shall be designed to measure a wide variety of cold potable water flows from hydrants where flows are in one direction. The hydrant meter provided shall be a Zenner FHZ30S or approved equal. The hydrant meter shall comply with AWWA C701 Class II performance standards. The only moving parts in the meter shall be the rotor assembly and vertical shaft. All components of the meter shall be lead free. The optional NC2530B-CV check valve assembly shall be included with the hydrant meter. The meters shall be 3" and read in century cubic feet.

SP 3 - VALVES

The minimum requirements for all valves shall, in design, material and workmanship, conform to the standards of the latest AWWA C509-87, and C504. All materials used in the manufacture of waterworks valves shall conform to the AWWA standards designed for each material listed.

<u>Gate Valve:</u> Gate valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed ANSI/AWWA C-515-99 latest revision. Gate valves shall be Waterous series 2500 Resilient Wedge Gate Valves. All nuts, bolts, and threaded rods shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

All gate valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

<u>Cutting in Valve:</u> Cutting in valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed ANSI/AWWA C-509 latest revision. Cutting in valves shall be Clow Model 2640 cutting in joint (MCJ) end Valves. All nuts, bolts, and threaded rods shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

All cutting in valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

The ALPHA restraint joint shall have a working pressure of 350 psi and be as licensed and manufactured by Romac Industries, Inc.

SP 4 - VALVE BOXES

Valve boxes and extensions must be cast iron only. Valve boxes shall be 6850 Series as manufactured by Tyler Union. Adjustable cast iron valve boxes shall be screw type. The screw type valve box shall be adjustable by screwing the upper section over the lower section. As shown on the schedule of prices, this item shall be bid as a complete system and as spare parts for purchase as needed. Castings with cast iron ring and cover, and cast iron parts of valve boxes, shall conform to the requirements of Standard Specifications for Gray Iron Castings, ASTM Designation A-48.

SP 5 - MISSION COUPLING

Mission repair couplings shall be Style CNSS non-shear sewer couplings as manufactured by Cascade Water Works, Mfg. Co. of Yorkville, IL. The coupling shall be constructed with an outer shell of T-304 (ASTM A-240/ASME SA-240) stainless steel with three stainless steel heavy duty

worm gear fasteners (SAE J-1508 - MIL 5059-A) permanently welded in place and passivated per ASTM A-380. The shell shall fully encircle a 40 durometer ribbed gasket made from virgin SBR (ASTM D2000) rubber formulated for sewer service.

SP 6 - REPAIR CLAMP

Repair clamps shall be manufactured by The Ford Meter Company, Inc. (FS1), Cascade Waterworks MFG. (CR1), Smith/Blair (261), PowerSeal (3121AS) or an approved equal. All repair clamps shall have type 304 stainless steel components and an 18/8 grade. All clamps shall have a Nitrile (Buna-N) gasket. The lugs shall also be type 304 stainless steel.

SP 7 - DUCTILE IRON SLEEVE FITTINGS

All fittings shall be ductile iron conforming to the latest ANSI specifications A21.10 for short body fittings, twelve inches (12") or less, and AWWA C110 for fittings fourteen inches (14") or larger. Long body sleeves shall be provided unless directed otherwise. When specified to have mechanical joints, Mega Lug wedge action retaining glands, or approved equal shall be included. All nuts and bolts used for jointing shall be stainless steel, Grade 304 bolts, and Grade 316 nuts. Ductile Iron sleeves shall be manufactured by Tyler Union or an approved equal.

SP 8 - CAST COUPLINGS

Cast Couplings shall be manufactured by The Ford Meter Company, Inc. (Style FC1), Cascade Waterworks MFG. (Omega Coupling), Smith/Blair (441), PowerSeal (3501), or an approved equal. All couplings shall meet or exceed requirements of AWWA C-219 and should have a minimum working pressure of 250 psi. All couplings shall be certified to NSF/ANSI 61-G with Nitrile (Buna N) gaskets. An approved equal is to come with stainless steel Grade 304 bolts and Grade 316 nuts.

SP 9 - SINGLE BOLT CAST COUPLINGS

Single Bolt Cast Couplings shall be Alpha restrained joint manufactured by Romac Industries, Inc. or an approved equal. All couplings shall meet or exceed requirements of AWWA A 536, grade 65-45-12 and should have a minimum working pressure of 350 psi. All couplings shall contact gaskets certified by UL to meet NSF/ANSI 61. An approved equal is to come with stainless steel Grade 304 bolts and Grade 316 nuts.

SP 10 - MEGALUG RETAINER GLAND

MegaLug retainer glands shall be Series 1100 (DI) or Series 2000PV (PVC) as manufactured by EBBA Iron Inc. or approved equal (set screw retainer glands will not be accepted). The mechanical joint restraint shall be constructed of ductile iron meeting ASTM A536 and it shall have a pressure rating of 350 PSI. All nuts and bolts shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

SP 11 - MECHANICAL JOINT ACCESSORY KIT

The mechanical joint accessory kit shall include a rubber gasket and a ductile iron backing flange of the size specified in the pay item and the appropriate number of bolts required for the kit size. The kit manufacturer shall be Tyler Union, or an approved equal, and the components shall be for use with ductile iron pipe. The mechanical joint restraint shall be constructed of ductile iron meeting ASTM A536 and it shall have a pressure rating of 350 PSI. All items shall be

manufactured in the U.S.A. All nuts and bolts shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

SP 12 - DUCTILE IRON BORED OUT FLANGE

Ductile iron bored out flanges shall be manufactured by Tyler Union or an approved equal.

SP 13 - SDR-26 PVC PIPE

All pipe shall meet the requirements of ASTM D3034 for 4" through 15" and F679 for 18" through 36" pipe. All pipe shall be made from quality PVC resin, compounded to provide physical and mechanical properties that equal or exceed cell class 12454 or 12364 as defined in ASTM D1784. The bell shall consist of an integral wall section with a solid cross section elastomeric gasket which meets the requirements of ASTM F477.

SDR-26 PVC plastic pipe shall be tested as follows:

Manufacturer shall submit certified copies of all reports of tests conducted by an independent laboratory of PVC Plastic Pipe. Tests shall be conducted in accordance with Standard Method of Test for "External Loading Properties of Plastic Pipe by Parallel-Plate Loading", ASTM Standard D2412. Tests shall also be conducted in accordance with ASTM D 3212 to demonstrate joint performance at 5% maximum diametric deflection of the spigot, as specified in Article 7.4 of ASTM D 3212.

Maximum allowable ordinate as measured from the concave side of the pipe shall not exceed 1/16 inch per foot of length. Pipe shall be so constructed that the initial internal vertical diameter does not decrease by more than 5% in order to provide the complete hydraulic carrying capacity conceived by the design engineer, and to obtain the joint performance at 5% maximum diametric deflection as specified in Article 7.4 of ASTM D 3212.

SP 14 - CLASS 52 DUCTILE IRON PIPE

Ductile-iron pipe shall conform to ANSI Specification A21.51 or AWWA C151. Class 52, thickness designation, casting, marking, testing, etc. shall be provided in accordance with applicable ANSI or AWWA standards

Cement lining shall be included in accordance with ANSI A21.4 (AWWA C-104). All pipe, specials and fittings shall be cement mortar lined in the shop with centrifugally spun lining in accordance with AWWA C205-85 or cement mortar lined mechanically in accordance with AWWA C602-83. Use ASTM C150, Type II, cement for lining. Field joints shall be made in accordance with AWWA C205, Appendix A.

Pipe joints shall be either push-on (rubber gasket) type as recommended by the pipe manufacturer. All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joint.

SP 15 - CORPORATION STOP

Corporation stops shall have flared connections conforming to ANSI/AWWA C-800 and shall be the following brands or approved equal: A.Y. McDonald 4701 or Ford F-600. All appropriate parts shall be lead free and be stamped "NL".

SP 16 - CURB BOX

All curb boxes shall be Minneapolis pattern with flared connections conforming to ANSI/AWWA C800 and shall be the following brands or approved equal: A.Y. McDonald 6104, Ford B22-444M, or Mueller H-15151. All curb boxes shall be 5'6" bury Minneapolis pattern with minimum 1-1/4" upper section equal to: A.Y. McDonald 5614 or Ford EM-55-56. (Accepted Brands: Mueller, Star Pipe Products, Sigma/Nappco, Bingham & Taylor or approved equal). All appropriate parts shall be lead free and be stamped "NL".

SP 17 - METER HORN

Meter horns shall be CH88-33 style as manufactured by The Fort Meter Box Company, Inc. or engineer approved equal. All brass shall conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600-85-5-5-5). Meter threads shall conform to AWWA C700. Copper shall conform to ASTM B-75 and shall consist of copper alloy #122.

SP 18 - BALL VALVE

Ford ball valves shall be manufactured in accordance with AWWA C800. The valve shall be designed to withstand water pressure up to 300 psi and maintain a watertight seal. The valve shall include a fluorocarbon-coated ball that is supported by molded Buna-N or EPDM rubber seats.

SP 19 - METER COUPLING

Meter couplings shall be C38-11-2-NL 5/8", C38-23-2-75-NL 3/4", or C38-44-2-625-NL 1" models as style as manufactured by The Fort Meter Box Company, Inc. or engineer approved equal. This item shall be bid per Package with 50 per package for the 5/8" size, 25 per package for the 3/4", and 15 per package for the 1" couplings. The 5/8" and 3/4" meter couplings shall have a 3/4" male thread size and the 1" meter couplings shall have a 1" male thread size. Couplings shall be Ford Meter Box no-lead brass products manufactured from UNS/CDA No. 89833 alloy.

SP 20 - TYPE K COPPER

Type K copper pipe shall be supplied in the diameter and length as specified. The type K copper shall have a color code of green and shall be in accordance with ASTM B 88 & AWWA publication M-22 entitled, "Water Service Lines And Meters".

SP 21 - WATER METER FLANGE KIT

The flange kit shall include two water meter flanges, two gaskets, four stainless steel nuts and bolts for the 1 ½" and 2" flanges, eight stainless steel nuts and bolts for the 3" and sixteen stainless steel nuts and bolts for the 4" flanges. All parts and components manufactured 100% in USA. Parts shall be manufactured in accordance with the following specifications: Bronze casting C87850 ECOBRASS (.09% lead max), Round flanges conforming to ANSI B16.1, Gaskets ANSI/AWWA C111/A21.11, Bolts ANSI B18.2.1, Nuts SAE J995 Grade 5 with dimensional tolerances ANSI B182.2.2, & plating ASTM F1491. All appropriate parts shall be lead free and be stamped "NL".

SP 22 - MARKING PAINT

Marking paint provided shall be Krylon Industrial Quik-Mark (or approved equal) for inverted use,

water based, 20 ounces in size (net weight 17 oz), and of the color specified. The paint shall also be environmentally safe.

SP 23 - NEENAH FRAMES AND GRATES

Frames and lids shall be manufactured by NEENAH and the type specified. All manhole type B covers shall have "CITY OF AURORA" cast into the top in two (2) inch high lettering and shall be the concealed pick hole type. All type B covers shall have a machined surface and a watertight rubber gasket seal.

SP 24 - HYDRAULIC CEMENT

Hydraulic cement shall be Speccrete W-10 Waterstopper Plug Cement or an engineer approved equal. The compressive strength shall be a minimum 4,200 P.S.I. after 28 days per ASTM C-109. The hydraulic cement shall have a final set time of 3-5 minutes per CRD C-621. The requested material shall come in a 50 pound pail. The cost supplied shall be for each 50 pound pail of hydraulic cement.

SP 25 - STORM STRUCTURES

New storm structures shall be constructed of pre-cast reinforced concrete in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois.

SP 26 - TYPE II BARRICADE

All type II barricades shall be in conformance with the Illinois Department of Transportation's "Standard Specifications For Road and Bridge Construction" (current edition) and be equipped with a yellow light that is battery operated.

SP 27 - GROUND CLAMP

Ground clamps shall be Burndy C11N model or engineer approved equal. The ground clamp shall be cast bronze for cable to water pipe or copper tube connection using a 10 - 2 AWG. It shall connect to a $\frac{1}{2}$ " to 1" water pipe with a torque of 50 of-in.

SP 28 - BUTYL MASTIC SEALANT

Butyl Mastic Sealant shall be NPC-Bidco C-56 Trelleborg or engineer approved equal. Each roll of Butyl Mastic Sealant shall be thickness, width and length as specified in the individual pay items. All approved equals shall meet or exceed the following:

- Federal Specifications SS-S-210 A "Sealing Compound, Preformed Plastic for Pipe Joints", Type 1, Rope Form
- AASHTO Designation M-198 75 I, Type B, Flexible Plastic Gasket (Bitumin)
- ASTM Designation C-990-91.

SP 29 - ADS PIPE

Pipe shall consist of N-12 Dual Wall WT IB HDPE Pipe as manufactured by Advanced Drainage Systems (ADS) or approved equal. The pipe supplied shall utilize water tight joints meeting ASTM D3212. The pipe shall be joined using a bell & spigot joint meeting AASHTO M252 for 4-10 inch diameter pipe, AASHTO M294 for 12-60 inch diameter pipe, and ASTM F2306 for 12-60 inch diameter pipe. Gaskets shall be installed by the pipe manufacturer and covered with a removable,

protective wrap to ensure the gasket is free from debris. Material for pipe and fitting production shall be high-density polyethylene confirming with the minimum requirements of cell classification 424420C for 4-10 diameters, and 435400C for 12-60 inch diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content shall not exceed 4%.

SP 30 - COMPOSITE ADJUSTMENT RINGS

The acceptable manufacturer shall be PRO-RING by Cretex Specialty Products or an approved equal. The grade adjustment rings shall be manufactured from ARPRO Expanded Polypropylene, (EPP), black. 5000 series meeting ASTM D3575 and ASTM D48-1913; B6D7G4L3M₂4S2T₁7W7. The rings shall be manufactured using a high compression molding process to produce a finished density of 120 g/l ((7.5pcf). "Grade" adjustment rings may contain either an upper or lower keyway (tongue and groove) for vertical alignment and/or an adhesive trench on the underside with a flat top. The grade adjustment rings shall be capable of supporting the minimum requirements of AASHTO M-306, H-25 and HS-25, be UV stable and be resistant to chemicals and corrosion commonly associated with the sanitary and storm sewer environments.

Sealant shall be Cretex 28 oz. adhesive sealant in white or approved equal and shall be paid for each tube. The M-1 Structural Adhesive/Sealant or equal meeting the following specifications shall be used to set the rings as required in the manufacturers specifications:

- ASTM C-920, Type S, Grade NS, Class 25, Uses NT, T, M, G, A and O
- Federal Specification TT-S-00239-C Type II, Class A
- Corps of Engineers CRD-C-541, Type II, Class A
- Canadian Standards Board CA 19, 13-M82
- AAMA 802.3-08 Type II, AAMA 803.3-08 Type I and AAMA 805.2-08 Group C

SP 31 - T-BOLTS AND NUTS

All T-Bolts and Nuts shall be manufactured per ANSI/AWWA C111/A21.11. The acceptable manufacturer shall be Active Waterworks Industries or an approved equal. T-Bolts shall be stainless steel grade 304 and nuts shall be stainless steel grade 316. The size shall be $\frac{3}{4}$ " x 3.5". The cost supplied shall be per each case of 125 T-Head Bolts and Nuts.

SP 32 - INLET FILTERS

All inlet filters shall be Flex Storm Catch-it models as manufactured by Advanced Drainage Systems or an approved equal. The models provided shall fit inside the IDOT frame types listed.

SP 33 - CHIMNEY SEALS

All chimney seals shall be bandless and be Adaptor-Seal, Infi-Shield, CanUSA (wrapid seal), Flexrib or approved equal external chimney seal.

SP 34 - WATER SERVICE COUPLINGS

All water service repair couplings shall be the model and manufacturer listed in the attached table below or an engineer approved equal. All connections to copper pipes shall utilize a flared fitting.

Water Service Coupling Models				
Part	Ford Meter Co.	A.Y. McDonald Mfg. Co.		
3/4" Flare Copper to 3/4" Flare Copper Coupling	Q22-33-NL	74758 3/4"		
3/4" Flare Copper to 1" Flare Copper Coupling	Q22-34-NL	74758 3/4"x1"		
1" Flare Copper to 1" Flare Copper Coupling	Q22-44-NL	74758 1"		
5/8" Double Extra Strong Lead (XXS) or 3/4" Strong Lead (S) to 3/4" Flare Copper Lead-Pack Coupling	Q12-33-Q32-23- NL	74758C-68 3/4"x5/8", 74758C- 66 3/4"		
3/4" XS to 3/4" Flare Copper Lead-Pack Coupling	Q22-33-NL	74758C-67 3/4"		
3/4" XXS to 3/4" Flare Copper Lead-Pack Coupling	Q32-33-NL	74758C-68 3/4"		
5/8" XXS or 3/4" S to 1" Flare Copper Lead-Pack Coupling	Q12-34-Q32-24- NL	74758C-68 1"x5/8", 74758C-66 1"x3/4"		
3/4" XS to 1" Flare Copper Lead-Pack Coupling	Q22-34-NL	74758C-67 1"x3/4"		
1" S to 1" Flare Copper Lead-Pack Coupling	Q12-44-NL	74758C-66 1"		
1" XS to 1" Flare Copper Lead-Pack Coupling	Q22-44-NL	74758C-67 1"		
" XXS to 1" Flare Copper Lead-Pack Coupling	Q32-44-NL	74758C-68 1"		

SP 35 - HIGH PERFORMANCE GREASE FOR FOOD PROCESSING EQUIPMENT

The product shall be a high performance multipurpose grease used for food and beverage processing equipment. The acceptable product shall be FM Grease 387 as manufactured by Fuchs Lubricants Co. or an approved equal. This product shall be acceptable as a grease with incidental food contact (H1) according to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds (2013). This product shall be provided in the **6-1/2 ounce size** and shall be paid for as an each pay item.

SP 36 - MINERAL OIL LUBRICANT

The product shall be a medium SAE 20 grade oil used for general oiling or hydraulics. The acceptable product shall be FMO-350, ISO Grade 68, USP White Mineral Oil as manufactured by Lubriplate Lubricants or an approved medium SAE 20 grade oil equal. This product shall be acceptable for use as a release agent (3H) and as a lubricant with incidental food contact (H1) according to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds (2013). This product shall be provided in the **5 gallon pail size** and shall be paid for as an each pay item.