

Banner Associates, Inc.
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ADDENDUM | No. 1

PROJECT BMU Raw & Treated Water Pipelines – Phase 1

BID DATE 1:30 PM February 23, 2022

BID | Municipal Utilities Building

LOCATION | 525 Western Ave. Brookings, SD 57006

ISSUE DATE February 18, 2022

NOTICE | Failure to acknowledge all addenda in the BID may cause rejection of the BID.

See Instructions to Bidders.

SCOPE OF THIS ADDENDUM

The following becomes a part of the original project manual and drawings, taking precedence over the items that may conflict. The bidder shall note receipt and make acknowledgment of the Addendum on his/her bid form, incorporating its provision in his/her bid.

PRIOR APPROVALS

The following manufacturers of the items and materials have been added to the list of approved manufacturers. Listing of an item does not change the requirements of the specifications. Equipment furnished shall meet the materials and performance requirements as specified.

SECTION	DESCRIPTION	MANUFACTURER
BMU Water	Diamond Lok-21 Restrained Joint Pipe	Diamond Plastics Corp.

CLARIFICATIONS

Soil Boring Logs

Soil borings were completed by the SDDOT as part of the Exit 130 Interchange project. The boring logs and a soil profile at the new bridge location are attached to this addendum.

Interchange Project Schedule

Bowes Construction project schedule as of 2-17-2022 is attached to this addendum.



Diamond Lok-21 Pipe

Diamond Lok-21 pipe will be acceptable as restrained joint pipe in place of bell restraints. It will NOT be allowed inside any casing pipe.

Fusible PVC Pipe

Fusible PVC pipe will be acceptable as restrained joint pipe in place of bell restraints. It WILL be allowed inside any casing pipe. Casing spacers will be required.

Bore & Jack

Other methods of installation and lengths of bored casing will be considered. A boring plan will be required to be submitted and approved by the Owner and SD DOT.

Trench Dewatering

Currently, dewatering operations are to be confined to areas outside of the Interstate 29 ROW. The SD DOT will consider alternatives inside of the ROW. A dewatering plan will be required to be submitted and approved by the Owner and SD DOT.

PROJECT MANUAL

The following additions, changes and clarifications have been made to the Project Manual.

Section C-200 - INSTRUCTION TO BIDDERS

Article 14 - Submittal of Bid, 14.02.

Clarification:

Date of bid opening is February 23, 2022

Section C-410 - BID FORM FOR CONSTRUCTION CONTRACT

Remove: Remove Bid Form in its entirety.

Insert: New Bid Form

Section C-520 – AGREEMENT BETWEEN OWNER AND CONTRACTORFOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

Remove: Remove Agreement in its entirety.

Insert: New Agreement



Section 01 1000 General Requirements

Add: 4.6 Contractor Storage Yard and Staging Area

A. A specific area has not been identified for Contractor's storage and staging. The Contractor shall locate and secure a storage and staging area at their own expense. This area shall be accessible to the Owner and Engineer at all times. This item shall be incidental to the lump sum price for Mobilization.

Add: 4.7 Haul Route

- A. The Contractor is responsible for contacting the appropriate governing agency if a Haul Route Agreement is necessary before hauling on any roadways from non-commercial sites and for city, county and/or township roads.
- B. Any haul routes shall be maintained, repaired, and/or reconstructed to their original condition. All haul routes must be approved by the appropriate governing agency.

Section 33 0523 Trenchless Utility Installation

Section 2.15 Cathodic Protection

Clarification: Four (4) seventeen (17) pound anodes will be required on each end of the steel casing pipe and shall be incidental to the unit price for "Bore and Jack".

BMU Standard Specifications for Watermain Construction

Section 2.9 Anchor Couplings

Clarification:

Anchor couplings shall be two (2) feet in length.

Section 2.20 Galvanic Anodes

Clarification:

Anodes shall be seventeen (17) pounds with #12 AWG stranded copper wire

Section 3.17 Galvanic Anodes

Clarification:

Anodes shall be attached with #12 AWG stranded copper wire

Section 4.22 Galvanic Anodes

Clarification:

Galvanic Anodes are required on all bituminous coated fittings 16" or larger and are incidental to each fitting. Anodes are not required on valves and hydrants.



DRAWINGS

The following additions, changes and clarifications have been made to the Drawings.

Drawing Sheet B-1.

Estimate of Quantities,

Remove: Sheet B-1

Add: New Drawing Sheet

This drawing sheet has been updated with a revised estimate of quantities.

Drawing Sheet D-2.

General Notes,

Remove: Sheet D-2

Add: New Drawing Sheet

This drawing sheet has been updated with a note regarding trenchless utility installation.

Drawing Sheet D-4.

Sequencing Plan,

Remove: Sheet D-4

Add: New Drawing Sheet

This drawing sheet has been updated with a revised sequencing plan for Phase 1A.

Drawing Sheet D-6.

Dewatering Plan,

Remove: Sheet D-6

Add: New Drawing Sheet

This drawing sheet has been updated to identify a new discharge location for the dewatering pipe.



NOTE

The Plan Holders List and Addendums are available on our website at http://www.bannerassociates.com by clicking on View Bid Information / Project Name / Project Information link.

Project Manual and Drawing inquiries regarding the work should be directed to:

CONTACT PERSON(S)

Banner Associates, Inc.	Tel 1-605-692-6342 Toll Free 1-8	355-323-6342 Fax 1-605-692-5714
Justin Bucher, PE	Project Engineer	justinb@bannerassociates.com

ATTACHMENTS

- 1. Soil Boring Logs
- 2. Soil Profile
- 3. Bowes Construction Interchange Project Schedule
- 4. New C-410 Bid Form for Construction Contract
- 5. New C-520 Agreement Between Owner and Contractor For Construction Contract (Stipulated Price)
- 6. Revised Drawing Sheets



Justin Bucher, PE #14123

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

PROJECT EN 0295 (45)30 DOV BROKINGS

DATE 8/6/2020 SEC. 36 TIDN R 50 W SHEET 1 OF 1 BORING NO. DZ GENERAL LOCATION 20th St S. & 22nd Ave Brookings NW corner STA. 9+57 OFFSET 65 L WATER/CAVED dry, 20 STATIC 9.7, 16 ELEV. DRILLER Malson MFODS LOGGED BY E. Bonn STREAM NA SAMPLE # DEPTH DEPTH DESCRIPTION OF SOIL NO. COLOR Cranch @ 1' TESTS Brown day sitt w/ gravel 0 - 1.5 smooth 15 Down Silt clay, plagic 4 light brom silt clay, plastic 4- 14 Brown silt day , moist, plastic 14-20 end of boring 20

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

FIELD LOG SHEET (AUGER TEST)

PROJECT KN	U2 45 (4	5) 130	CLOV Brookings DATE B/6	(a) 27 (b)
SEC. 31/6	T. 110/109A	1 R 49 V	SHEET OF) SOULING NO DE	•
GENERAL LOCATIO	DOTH S	st. s. r	ought 150' E of 22nd Ave Brooking	ч.(
TA. 12+ 25 1	OFFSET 9'	R INIT	CAVEDORY, 150' E of 22 nd Ave, Brooking CAVEDORY, 15 WATER/CAVED dry, 14.7 8/7 ELEV.	<u> </u>
RILLER Malsa	m MFO	25 LOGGE	D BY E, Brown STREAM NA	
DEPTH DEPTH	RUN	SAMPLE #		LAB
- 1	10.	COLON	light brown silt clay w/gravel, road	ESTS
- 10.5	-	<u> </u>	dark brown silt clay, plasfic	-
	-			
1.5-11			Brown silt clay w/gravel, plastic	10.5
- 15		6	Brown silt clay, plastic	H.5
			end of bonny 15	- A2
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SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION PROJECT EM 0295 (45) 120 020 COUNTY Brookings DATE 8/6 SEC. 31/6 T 10/109N R 49W SHEET OF D BORING NO. D9 GENERAL LOCATION 20th St. S. ronghly 625 E of 22nd Ave, Brookings STA. 17+25 +25 2 R INITIAL Ly 9.5 STATIC Ly 9.5 8/7 WATER/CAVED Ly 9.5 ELEV. DRILLER Malsum M FODS, LOGGED BY E. Brown SAMPLE # DEPTH DEPTH LAB DESCRIPTION OF SOIL NO. COLOR TESTS light brom cay situlgarel, road dark brown silt clay, plastic Grown Silt gravel, up to 3/4" Brown Sand clay silt 11.5 Sped up & smoots 8.5 13.5 Brom Crunch 11.5 bom sand w/ clay & good, wet 15-15 Slowed B.send of boring 15

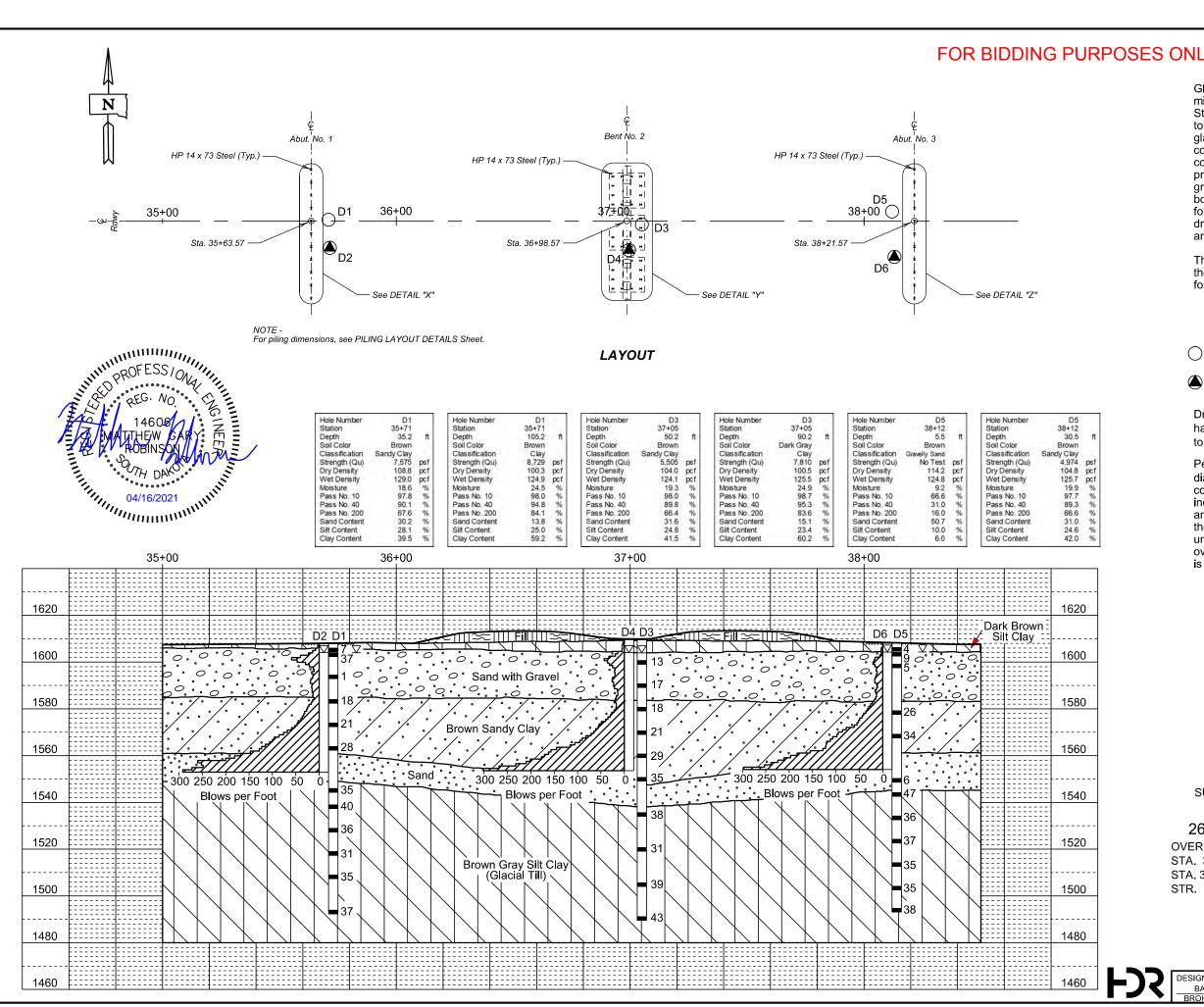
SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

FIELD LOG SHEET (AUGER TEST)

PROJECT EM 0295 (45) 130 020 COUNTY Brookings DAT SEC. 31/6 T 110/109 N R 49W SHEET 1 OF) BORING NO. DID GENERAL LOCATION 20th St. S. roughly 1125 E of 22nd Ave, Brooking)

STA. 22+ 25 125 R WATER/CAVED Wet, 7.3 WATER/CAVED 6,9,7 ELEV. DRILLER Malsang MFODS LOGGED BY E. Brown STREAM NA RUN SAMPLE # DEPTH DEPTH LAB DESCRIPTION OF SOIL NO. COLOR TESTS 0.5 light boom clay silt wil gover, wand dark brown silt chy, prastic 0.5-6.6 Aust@3 brown clay sand in gravel, not 13. Crunch 6.5 end of boring 13

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION PROJECT EM 0295 (95) 130 COUNTY Brookings 0201 DATE 8/6 SEC. 31/6 T1/0/109 NR 49 W SHEET 1 OF) BORING NO. D 1) GENERAL LOCATION 20th St. S. roughly 1600' W of 22nd Avr. Brookings STA. 27+25 125 OFFSET O WATER/CAVED 3.2 3.3 STATIC 3.8 3.9 8/7 ELEV. DRILLER Malsam MFO \$5 LOGGED BY E. Brown STREAM NA SAMPLE # DEPTH DEPTH LAB DESCRIPTION OF SOIL NO. COLOR TESTS Brown silt clay u/ gravel, plastic Crunch L5 Drom sand w/ clay & gravel, ret end of bonny 13



Glaciated Terrain contains all sizes of natural mineral sediment ranging from clay to boulders. Streams originating in or flowing through glaciated topography contain sediment loads derived from glaciated sources. Stream and river crossings contain sediment naturally sorted and randomly concentrated. Alluvial sediment located at this project location may have concentrated coarser gravel such as pebbles, cobbles and boulders. The borings shown only represent material that was found at the exact location of the small diameter drill hole. Coarse granular material may be present in areas not penetrated by the depicted borings.

PROJECT

EM 0295(45)130

S.D.

E8

E36

The Geotechnical Engineering Activity has all of the boring logs and laboratory test results available for review at the Central Office in Pierre.

LEGEND

Drive tests are conducted by dropping a 490 pound hammer 30 inches to drive a $2\frac{7}{6}$ inch drill stem to measure the resistance to penetration of the soil.

Penetration test holes are drilled with a 6% inch diameter hollow stem auger. Penetration tests are conducted by dropping a 140 pound hammer 30 inches to obtain 2 inch nominal diameter samples and to measure the resistance to penetration of the soil. Penetration Test results are listed as uncorrected "N" values in blows per foot. Blows over inches are listed if refusal is achieved, which is 50 blows within one 6 inch set.

GROUNDWATER ELEVATIONS

AUGUST 2020

D1	1604.0
D2	1604.0
D3	1603.9
D4	1604.
D5	1604.4
D6	1604.0

MEASURED SKIN FRICTION

	ELEV.	PSF
D2	1552.9	62
D4	1553.6	197
D6	1554.1	487

SUBSURFACE INVESTIGATION AND PILING LAYOUT FOR

260'-3" PRESTRESSED GIRDER BRIDGE

OVER I-29 0° SKEW
STA. 35+62.44 TO SEC 6/31-T109/110N-R49W
STA. 38+22.69 EM 0295(45)130
STR. NO. 06-185-180 HL-93

BROOKINGS COUNTY

S. D. DEPT. OF TRANSPORTATION

APRIL 2021





0		Task Mode	Task Name	Duration	Start	Finish	Resource Names	2021 Nov	Qtr 1, 2022 Dec Jan Fel	Qtr 2, 2022 Mar Apr May Jun	Qtr 3, 2022 Jul Aug Se	Qtr 4, 2022 Qtr p Oct Nov Dec Ja	1, 2023 n Feb Mar	Qtr 2, 2023 Apr May Jun	Qtr 3, 2023 Jul Aug
1		-5	20th Street and Interchange	419 days	Mon 12/6/21	Fri 7/14/23								<u> </u>	
2		9	Clearing Trees	12 days	Mon 12/6/21	Tue 12/21/21	Bowes		Bowes						
8		-	Traffic Control	3 days	Mon 3/28/22	Wed 3/30/22	Dakota Traffic			Dakota Traffic					
	-	4	Salvage Traffic Sign	1 day	Thu 3/31/22	Thu 3/31/22	Dakota Traffic			Dakota Traffic					
		4	Erosion Control	3 days	Mon 3/28/22	Wed 3/30/22	Kerry's			Kerry's					
5		-	Remove Concrete Footing	1 day	Thu 3/31/22	Thu 3/31/22	Bowes			Bowes					
7		-5	Remove Fence	5 days	Thu 3/31/22	Wed 4/6/22	Jim River Fence			Jim River Fer	ice				
		5	Salvage Extruded Panel Sign	1 day	Thu 3/31/22	Thu 3/31/22	Muth ,BX Civil			Muth ,BX Civi	ĺ				
	.	-5	Unclassified Excavation	20 days	Mon 4/4/22	Fri 4/29/22	Bowes			Bowes					
) 🚨		5	Muck Excavation	5 days	Mon 4/11/22	Fri 4/15/22	Bowes			Bowes			,		
*		4	Pit Run	15 days	Mon 4/11/22	Fri 4/29/22	Bowes			Bowes					
2 &		4	Base Course	10 days	Mon 5/2/22	Fri 5/13/22	Bowes			Bowes		.	·		
.		5	Contractor Furnished Borrow	70 days	Mon 4/11/22	Fri 7/15/22	Bowes				Bowes				
ı.		-	Traffic Control	6 days			Dakota Traffic			ll.	Dakota 1	Traffic			
5		5	Remove 3 Cable Guardrail	2 days	Wed 4/13/22		BX Civil			BX Civil					
5	1	4	Bridge Structure	120 days	Mon 4/18/22	Fri 9/30/22	Journey Group					Journey Group			
7		-	Install Guard Rail	8 days	Thu 7/21/22	Fri 9/30/22	BX Civil					BX Civil			
3		4	Bridge Conduit	10 days	Tue 7/19/22		Muth					Muth			
	-	5	Storm Sewer Pipe	42 days	Mon 4/18/22							\A/!4I-			-
)	-	5	Ramps A & B	25 days	Mon 6/13/22						_				
		5	Sawcut	4 days	Mon 6/13/22		Northwest				Northwest				
2 &		5	Remove Concrete Pavement	2 days		Mon 6/20/22				Bowes					
3 &		5	Base Course	4 days	Tue 6/21/22		Bowes				Bowes				
1		5	10.5" PCC Pavement	15 days	Mon 6/27/22		BX Civil			_	BX Civil				
5		4	Ramp C & G	25 days	Wed 8/10/22	-									
5		4	Sawcut	4 days	Wed 8/10/22		Northwest				■ Nort	hwest			
7 🕹		- -	Remove Concrete Pavement	2 days	Tue 8/16/22						Bow				
3 &		3	Base Course	4 days	Thu 8/18/22						Bov	wes			
		3	10.5" PCC Pavement	15 days	Wed 8/24/22							BX Civil			
)		3	Remove Traffic Control	2 days	· · ·		Dakota Traffic					Dakota Traffic			
		5	Base Course	5 days	Mon 3/13/23								B	owes	
		•	Large Block Retaining Wall	5 days	Mon 3/20/23	-								BX Civil	
•		-3 -3	Curb and Gutter	20 days	Wed 3/29/23					<u> </u>		<u> </u>		BX Civil	
		-)	Asphalt Concrete	12 days	Wed 3/29/23 Wed 4/26/23					<u> </u>		·		Bowes	
		• •	Gravel Surfacing	3 days		Thu 5/11/23								Bowes	
		• •	Sidewalk	20 days	Wed 4/26/23									BX Ci	vil
7		-)	Electrical Lighting	45 days	Wed 4/20/23 Wed 3/22/23					.				Muth	
8		-												Bo	
·		-5	Placing Topsoil	12 days	Wed 5/24/23	rii 0/9/23	Bowes								
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Gutter 5 day	•	2 Tue 8/30/22			BX Civil	-
Concrete 3 day	•	2 Fri 9/2/22	Bowes		Bowes	
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BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

Brookings Municipal Utilities 525 Western Avenue Brookings, South Dakota 57006

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
 - C. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;

ARTICLE 3—BASIS OF BID—UNIT PRICES

- 3.01 Unit Price Bids
 - A. Bidder will perform the following Work at the indicated unit prices:

Item	Spec.	Description	Estimated	Unit	Bid Unit Price	Bid Amount
No.	Reference		Quantity			
1	01 7113 - 2.1	Mobilization	1	LS	\$	\$
2	01 0000 - 1.8	Construction Staking	1	LS	\$	\$
3	01 0000 - 4.4	Traffic Control Signs	1,012	SF	\$	\$
4	01 0000 - 4.4	Traffic Control, Miscellaneous	1	LS	\$	\$
5	01 0000 - 4.4	Type II Barricade	5	Each	\$	\$
6	01 0000 - 4.4	Type III Barricade, 8' Single	27	Each	\$	\$
		Sided				
7	01 0000 - 6.1	Sweeping	4	Hr	\$	\$
8	31 2400 - 4.2	Remove Curb and Gutter	158	LF	\$	\$
9	31 2400 - 4.2	Remove Concrete Pavement	24	SY	\$	\$
10	31 2400 - 4.2	Remove Bituminous Surfacing	1,474	SY	\$	\$
11	31 2400 - 4.3	8-Inch Scarify and Recompact	1,760	SY	\$	\$
12	31 2400 - 4.4	Unclassified Excavation	760	CY	\$	\$

13	31 2400 - 4.5	Unclassified Excavation, Digout	60	CY	\$	\$
14	31 2400 - 4.6	Exploratory Excavation	25	Hr	\$	\$
15	31 2400 - 4.7	Subbase Foundation Aggregate	100	Ton	\$	\$
16	31 2400 - 4.8	Placing Contractor Furnish	335	CY	\$	\$
		Topsoil				
17	31 2400 - 4.9	Adjustment of Valve Box	32	Each	\$	\$
18	31 2400 - 4.10	Adjust "Owner Furnished"	2	Each	\$	\$
		Manhole Frame and Lid			_	
19	31 2500 - 4.1	Erosion Control Blanket	1,003	SY	\$	\$
20	31 2500 - 4.2	Sediment Control at Type S	4	Each	\$	\$
24	24.2522.4.2	Reinforced Concrete Drop Inlet				4
21	31 2500 - 4.3	Construction Entrance	3	Each	\$	\$
22	31 2500 - 4.4	Concrete Washout Area	1	Each	\$	\$
23	31 2500 - 4.5	Manhole Construction Plate Marker	2	Each	\$	\$
24	32 1123 - 4.1	Base Course	1,330	Ton	\$	\$
25	32 1123 - 4.2	Geotextile Fabric	1,760	SY	\$	\$
26	32 1216 - 4.1	Asphalt Concrete	395	Ton	\$	\$
27	32 1613 - 4.1	Concrete Curb and Gutter	158	LF	\$	\$
28	32 1613 - 4.2	Concrete Fillet Section, 8" Thick	21	SY	\$	\$
29	32 9200 - 4.1	Seeding	507	Lb	\$	\$
30	32 9200 - 4.2	Fertilizer	125	Lb	\$	\$
31	32 9200 - 4.3	Hydro-Mulching	2	Ton	\$	\$
32	33 0523 - 4.1	30" Steel Encasement Pipe	201	LF	\$	\$
33	33 0523 - 4.1	Bore and Jack 30" Steel Casing Pipe	361	LF	\$	\$
34	33 0523 - 4.2	2" DIA. HDPE Encasement Pipe (HDD)	562	LF	\$	\$
35	33 0523 - 4.2	6" DIA. HDPE Encasement Pipe (HDD)	562	LF	\$	\$
36	BMU Water - 4.1	Remove Watermain	247	LF	\$	\$
37	BMU Water - 4.2	Remove Valve & Box	5	Each	\$	\$
38	BMU Water - 4.2	Remove Fire Hydrant	1	Each	\$	\$
39	BMU Water - 4.3	6" Pipe Bedding Material	143	LF	\$	\$
40	BMU Water - 4.3	8" Pipe Bedding Material	320	LF	\$	\$
41	BMU Water - 4.3	12" Pipe Badding Material	120	LF	\$	\$
42	BMU Water - 4.3	16" Pipe Bedding Material	65	LF	\$	\$
43	BMU Water - 4.3	20" Pipe Bedding Material	5,359	LF	\$	\$
44	BMU Water - 4.4	Trench Stabilization Material	200	Ton	\$	\$
45	BMU Water - 4.5	Imported Trench Backfill	1,600	Ton	\$	\$
46	BMU Water - 4.6	6" PVC Watermain	174	LF	\$	\$
47	BMU Water - 4.6	8" PVC Watermain	798	LF	\$	\$
48	BMU Water - 4.6	12" PVC Watermain	127	LF	\$	\$
49	BMU Water - 4.6	16" PVC Watermain	65	LF	\$	\$
50	BMU Water - 4.6	20" PVC Watermain	5,298	LF	\$	\$
51	BMU Water - 4.7	20" R.J. PVC Watermain Pipe	602	LF	\$	\$
52	BMU Water - 4.8	Tracer Wire	7,064	LF	\$	\$
53	BMU Water - 4.9	8" MJ Bend (11.25 Degree) w/ Joint Restraints	1	Each	\$	\$

54	BMU Water - 4.9	20" MJ Bend (11.25 Degree) w/ Joint Restraints	2	Each	\$	\$
55	BMU Water - 4.9	8" MJ Bend (22.5 Degree) w/ Joint Restraints	2	Each	\$	\$
56	BMU Water - 4.9	20" MJ Bend (22.5 Degree) w/ Joint Restraints	2	Each	\$	\$
57	BMU Water - 4.9	8" MJ Bend (90 Degree) w/ Joint Restraints	1	Each	\$	\$
58	BMU Water - 4.9	20" MJ Bend (90 Degree) w/ Joint Restraints	1	Each	\$	\$
59	BMU Water - 4.9	12" MJ Plug w/ Joint Restraints	1	Each	\$	\$
60	BMU Water - 4.9	16" MJ Plug w/ Joint Restraints	1	Each	\$	\$
61	BMU Water - 4.9	6" MJ Cap w/ Joint Restraints	1	Each	\$	\$
62	BMU Water - 4.9	8" MJ Cap w/ Joint Restraints	3	Each	\$	\$
63	BMU Water - 4.9	20" MJ Cap w/ Joint Restraints	1	Each	\$	\$
64	BMU Water - 4.9	8" x 6" MJ Tee w/ Joint	3	Each	\$	\$
		Restraints			•	,
65	BMU Water - 4.9	12" x 6" MJ Tee w/ Joint	1	Each	\$	\$
		Restraints			4	4
66	BMU Water - 4.9	12" x 8" MJ Tee w/ Joint Restraints	1	Each	\$	\$
67	BMU Water - 4.9	16" x 6" MJ Tee w/ Joint	1	Each	\$	\$
0,	Sivio Water 113	Restraints	-	Lacii	Y	Ψ
68	BMU Water - 4.9	20" x 6" MJ Tee w/ Joint	5	Each	\$	\$
		Restraints				
69	BMU Water - 4.9	20" x 8" MJ Tee w/ Joint Restraints	5	Each	\$	\$
70	BMU Water - 4.9	20" x 12" MJ Tee w/ Joint Restraints	1	Each	\$	\$
71	BMU Water - 4.9	20" x 16" MJ Tee w/ Joint Restraints	1	Each	\$	\$
72	BMU Water - 4.9	20" x 20" MJ Tee w/ Joint Restraints	2	Each	\$	\$
73	BMU Water - 4.9	8" x 6" MJ Reducer w/ Joint	1	Each	\$	\$
		Restraints				
74	BMU Water - 4.9	20" x 8" MJ Reducer w/ Joint	2	Each	\$	\$
		Restraints				
75	BMU Water - 4.9	20" x 12" MJ Reducer w/ Joint	1	Each	\$	\$
		Restraints				
76	BMU Water - 4.10	6" Foster Adaptor	1	Each	\$	\$
77	BMU Water - 4.11	20" MJ Anchor Couplings w/ Joint Restraints	6	Each	\$	\$
78	BMU Water - 4.13	8" MJ Sleeve w/ Joint	3	Each	\$	\$
		Restraints			•	
79	BMU Water - 4.13	20" MJ Sleeve w/ Joint Restraints	2	Each	\$	\$
80	BMU Water - 4.16	6" MJ Gate Valve & Box W/	12	Each	\$	\$
81	BMU Water - 4.16	Joint Restraints 8" MJ Gate Valve & Box W/	8	Each	\$	\$
	2.110 114101 4.10	Joint Restraints			7	*

82	BMU Water - 4.16	12" MJ Gate Valve & Box W/ Joint Restraints	2	Each	\$	\$
83	BMU Water - 4.16	16" MJ Gate Valve & Box W/ Joint Restraints	1	Each	\$	\$
84	BMU Water - 4.16	20" MJ Gate Valve & Box W/ Joint Restraints	9	Each	\$	\$
85	BMU Water - 4.19	Fire Hydrant w/ Joint Restraints (7'-6" Depth)	11	Each	\$	\$
86	BMU Water - 4.23	12" D.I. M.J. Cap w/ Blowoff Assembly	1	Each	\$	\$
87	BMU Water - 4.24	Temporary Water Main Bypass Pipe	1	LS	\$	\$
88	BMU Water - 4.25	Trench Dewatering	1	LS	\$	\$
89	BMU Water - 4.26	Dewatering Discharge Pipe	9,500	LF	\$	\$
				•	Total =	\$

B. Bidder acknowledges that:

- 1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
- 2. estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 Bid Acceptance Period

A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 Instructions to Bidders

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 Receipt of Addenda

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Bidder's Representations*

- A. In submitting this Bid, Bidder represents the following:
 - 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 - 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
 - 7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - 8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
 - 9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 - 10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 Bidder's Certifications

- A. The Bidder certifies the following:
 - 1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
 - 2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
 - 3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
 - 4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

Bidder's Contractor License No.: (if applicable)

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

This Agreement is by and between **Brookings Municipal Utilities** ("Owner") and **[name of contracting entity]** ("Contractor").

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:
 - Furnish and Install approximately 5,300 LF of 20" PVC Watermain Pipe, 600 LF of 20" RJ PVC Pipe, 65 LF of 16" PVC Watermain Pipe, 125 LF of 12" Dia. PVC Watermain Pipe, 800 LF of 8" Dia. PVC Watermain Pipe, and 175 LF of 6" Dia. PVC Watermain Pipe; all associated fittings and appurtenances.
 - Furnish and Install approximately 360 LF Bore & Jack 30" Steel Casing Pipe, 200 LF 30" Steel Casing Pipe (Open Cut), 560 LF 6"HDPE Encasement Pipe (HDD), 560 LF 2" HDPE Encasement Pipe(HDD).
 - Furnish and Install approximately 1,330 tons of Base Course, 395 tons of Asphalt Concrete.
 - Miscellaneous traffic control, erosion control, and cleanup items

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: **BMU Raw & Treated Water Pipelines – Phase 1**

ARTICLE 3—ENGINEER

- 3.01 The Owner has retained **Banner Associates, Inc.** ("Engineer") to act as Owner's representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.
- 3.02 The part of the Project that pertains to the Work has been designed by "Engineer".

ARTICLE 4—CONTRACT TIMES

- 4.01 Time is of the Essence
 - A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Dates*

A. The Work will be substantially complete on or before **November 4, 2022**, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before **December 16, 2022**.

4.04 Milestones

- A. Parts of the Work must be substantially completed on or before the following Milestone(s):
 - Milestone 1: The Contractor will commence work under this Contract and complete all Work on Phase 1A (as defined in the plans) on or before May 13, 2022. The Work will be considered complete when all steel casing is installed.
 - 2. Milestone 2: The Contractor will commence work under this Contract and complete all Work on Phase 1B (as defined in the plans) within 45 calendar days. Calendar day count will start on the date traffic control is setup. The Work will be considered complete when the watermain is installed, pressure tested, disinfected, and open for service, and all streets are paved and fully open to traffic.
 - 3. Milestone 3 The Contractor will commence work under this Contract and complete all Work within the 34th Avenue S Right-of-Way (as defined in the plans) within **30 calendar** days. Calendar day count will start on the date traffic control is setup. The Work will be considered complete when the watermain is installed, pressure tested, disinfected, and open for service, and all streets are paved and fully open to traffic.

4.05 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 - Substantial Completion: Contractor shall pay Owner \$1,050 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
 - Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$550 for each day that expires after such time until the Work is completed and ready for final payment.
 - 3. Milestones: Contractor shall pay Owner \$1,050 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestones, until Milestone is achieved, or until the time specified for Substantial Completion is reached, at which time the rate indicated in Paragraph 4.05.A.1 will apply, rather than the Milestone rate.
 - 4. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are not additive, and will not be imposed concurrently.

B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

4.06 *Special Damages*

- A. Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.
- B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.
- C. The special damages imposed in this paragraph are supplemental to any liquidated damages for delayed completion established in this Agreement.

ARTICLE 5—CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:
 - A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item).

Item	Spec.	Description	Estimated	Unit	Bid Unit	Bid Amount
No.	Reference		Quantity		Price	
1	01 7113 - 2.1	Mobilization	1	LS	\$	\$
2	01 0000 - 1.8	Construction Staking	1	LS	\$	\$
3	01 0000 - 4.4	Traffic Control Signs	1,012	SF	\$	\$
4	01 0000 - 4.4	Traffic Control, Miscellaneous	1	LS	\$	\$
5	01 0000 - 4.4	Type II Barricade	5		\$	\$
				Each		
6	01 0000 - 4.4	Type III Barricade, 8' Single	27		\$	\$
		Sided		Each		
7	01 0000 - 6.1	Sweeping	4	Hr	\$	\$
8	31 2400 - 4.2	Remove Curb and Gutter	158	LF	\$	\$
9	31 2400 - 4.2	Remove Concrete Pavement	24	SY	\$	\$
10	31 2400 - 4.2	Remove Bituminous	1,474	SY	\$	\$
		Surfacing				
11	31 2400 - 4.3	8-Inch Scarify and Recompact	1,760	SY	\$	\$
12	31 2400 - 4.4	Unclassified Excavation	760	CY	\$	\$
13	31 2400 - 4.5	Unclassified Excavation,	60	CY	\$	\$
		Digout				

			ı	1	Т	T
14	31 2400 - 4.6	Exploratory Excavation	25	Hr	\$	\$
15	31 2400 - 4.7	Subbase Foundation Aggregate	100	Ton	\$	\$
16	31 2400 - 4.8	Placing Contractor Furnish Topsoil	335	CY	\$	\$
17	31 2400 - 4.9	Adjustment of Valve Box	32	Each	\$	\$
18	31 2400 - 4.10	Adjust "Owner Furnished" Manhole Frame and Lid	2	Each	\$	\$
19	31 2500 - 4.1	Erosion Control Blanket	1,003	SY	\$	\$
20	31 2500 - 4.2	Sediment Control at Type S	4	 	\$	\$
20	31 2300 4.2	Reinforced Concrete Drop Inlet	7	Each	Ÿ	7
21	31 2500 - 4.3	Construction Entrance	3	Each	\$	\$
22	31 2500 - 4.4	Concrete Washout Area	1	Each	\$	\$
23	31 2500 - 4.5	Manhole Construction Plate Marker	2	Each	\$	\$
24	32 1123 - 4.1	Base Course	1,330	Ton	\$	\$
25	32 1123 - 4.2	Geotextile Fabric	1,760	SY	\$	\$
26	32 1216 - 4.1	Asphalt Concrete	395	Ton	\$	\$
27	32 1613 - 4.1	Concrete Curb and Gutter	158	LF	\$	\$
28	32 1613 - 4.2	Concrete Fillet Section, 8" Thick	21	SY	\$	\$
29	32 9200 - 4.1	Seeding	507	Lb	\$	\$
30	32 9200 - 4.2	Fertilizer	125	Lb	\$	\$
31	32 9200 - 4.3	Hydro-Mulching	2	Ton	\$	\$
32	33 0523 - 4.1	30" Steel Encasement Pipe	201	LF	\$	\$
33	33 0523 - 4.1	Bore and Jack 30" Steel Casing Pipe	361	LF	\$	\$
34	33 0523 - 4.2	2" DIA. HDPE Encasement Pipe (HDD)	562	LF	\$	\$
35	33 0523 - 4.2	6" DIA. HDPE Encasement Pipe (HDD)	562	LF	\$	\$
36	BMU Water - 4.1	Remove Watermain	247	LF	\$	\$
37	BMU Water - 4.2	Remove Valve & Box	5	Each	\$	\$
38	BMU Water - 4.2	Remove Fire Hydrant	1	Each	\$	\$
39	BMU Water - 4.3	6" Pipe Bedding Material	143	LF	\$	\$
40	BMU Water - 4.3	8" Pipe Bedding Material	320	LF	\$	\$
41	BMU Water - 4.3	12" Pipe Badding Material	120	LF	\$	\$
42	BMU Water - 4.3	16" Pipe Bedding Material	65	LF	\$	\$
43	BMU Water - 4.3	20" Pipe Bedding Material	5,359	LF	\$	\$
44	BMU Water - 4.4	Trench Stabilization Material	200	Ton	\$	\$
45	BMU Water - 4.5	Imported Trench Backfill	1,600	Ton	\$	\$
46	BMU Water - 4.6	6" PVC Watermain	174	LF	\$	\$
47	BMU Water - 4.6	8" PVC Watermain	798	LF	\$	\$
48	BMU Water - 4.6	12" PVC Watermain	127	LF	\$	\$
49	BMU Water - 4.6	16" PVC Watermain	65	LF	\$	\$

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50	BMU Water - 4.6	20" PVC Watermain	5,298	LF	\$	\$
51	BMU Water - 4.7	20" R.J. PVC Watermain Pipe	602	LF	\$	\$
52	BMU Water - 4.8	Tracer Wire	7,064	LF	\$	\$
53	BMU Water - 4.9	8" MJ Bend (11.25 Degree)	1		\$	\$
		w/ Joint Restraints		Each		
54	BMU Water - 4.9	20" MJ Bend (11.25 Degree)	2		\$	\$
		w/ Joint Restraints		Each		
55	BMU Water - 4.9	8" MJ Bend (22.5 Degree) w/	2		\$	\$
		Joint Restraints		Each		
56	BMU Water - 4.9	20" MJ Bend (22.5 Degree)	2		\$	\$
		w/ Joint Restraints		Each		
57	BMU Water - 4.9	8" MJ Bend (90 Degree) w/	1		\$	\$
		Joint Restraints		Each		
58	BMU Water - 4.9	20" MJ Bend (90 Degree) w/	1		\$	\$
		Joint Restraints		Each		
59	BMU Water - 4.9	12" MJ Plug w/ Joint	1		\$	\$
		Restraints		Each		'
60	BMU Water - 4.9	16" MJ Plug w/ Joint	1		\$	\$
		Restraints		Each		'
61	BMU Water - 4.9	6" MJ Cap w/ Joint Restraints	1		\$	\$
		.,	_	Each	,	'
62	BMU Water - 4.9	8" MJ Cap w/ Joint Restraints	3		\$	\$
		.,	_	Each	,	'
63	BMU Water - 4.9	20" MJ Cap w/ Joint	1		\$	\$
	Divid Water 113	Restraints	-	Each	—	*
64	BMU Water - 4.9	8" x 6" MJ Tee w/ Joint	3		\$	\$
	2	Restraints	J	Each	 	*
65	BMU Water - 4.9	12" x 6" MJ Tee w/ Joint	1		\$	\$
		Restraints		Each		'
66	BMU Water - 4.9	12" x 8" MJ Tee w/ Joint	1		\$	\$
		Restraints		Each		'
67	BMU Water - 4.9	16" x 6" MJ Tee w/ Joint	1		\$	\$
		Restraints		Each		
68	BMU Water - 4.9	20" x 6" MJ Tee w/ Joint	5		\$	\$
		Restraints		Each		
69	BMU Water - 4.9	20" x 8" MJ Tee w/ Joint	5		\$	\$
		Restraints		Each		
70	BMU Water - 4.9	20" x 12" MJ Tee w/ Joint	1		\$	\$
		Restraints		Each		
71	BMU Water - 4.9	20" x 16" MJ Tee w/ Joint	1		\$	\$
		Restraints		Each		
72	BMU Water - 4.9	20" x 20" MJ Tee w/ Joint	2		\$	\$
		Restraints		Each		'
73	BMU Water - 4.9	8" x 6" MJ Reducer w/ Joint	1		\$	\$
		Restraints		Each		
74	BMU Water - 4.9	20" x 8" MJ Reducer w/ Joint	2		\$	\$
		Restraints	_	Each	·	'
75	BMU Water - 4.9	20" x 12" MJ Reducer w/	1		\$	\$
		Joint Restraints	_	Each	·	'
76	BMU Water - 4.10	6" Foster Adaptor	1		\$	\$
			_	Each	·	'
	L	1			<u> </u>	1

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					Total =	\$
89	BMU Water - 4.26	Dewatering Discharge Pipe	9,500	LF	\$	\$
88	BMU Water - 4.25	Trench Dewatering	1	LS	\$	\$
		Bypass Pipe				
87	BMU Water - 4.24	Temporary Water Main	1	LS	\$	\$
86	BMU Water - 4.23	12" D.I. M.J. Cap w/ Blowoff Assembly	1	Each	\$	\$
0.6	DA41114 4 22	Restraints (7'-6" Depth)	4	Each	A	A
85	BMU Water - 4.19	Fire Hydrant w/ Joint	11		\$	\$
84	BMU Water - 4.16	20" MJ Gate Valve & Box W/ Joint Restraints	9	Each	\$	\$
		Joint Restraints		Each	•	•
83	BMU Water - 4.16	16" MJ Gate Valve & Box W/	1		\$	\$
82	BMU Water - 4.16	12" MJ Gate Valve & Box W/ Joint Restraints	2	Each	\$	\$
		Joint Restraints		Each	_	
81	BMU Water - 4.16	8" MJ Gate Valve & Box W/	8		\$	\$
		Joint Restraints		Each		
80	BMU Water - 4.16	6" MJ Gate Valve & Box W/	12		\$	\$
		Restraints		Each		
79	BMU Water - 4.13	20" MJ Sleeve w/ Joint	2		\$	\$
		Restraints		Each		
78	BMU Water - 4.13	8" MJ Sleeve w/ Joint	3		\$	\$
		Joint Restraints		Each	,	,
77	BMU Water - 4.11	20" MJ Anchor Couplings w/	6		\$	\$

- B. The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.
- C. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

- 6.01 Submittal and Processing of Payments
 - A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 *Progress Payments; Retainage*
 - A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the **last** day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

- Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.
 - a. 90 percent of the value of the Work completed (with the balance being retainage).
 - If 50 percent or more of the Work has been completed, as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
 - b. <u>90</u> percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to <u>95</u> percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less <u>100</u> percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 Consent of Surety

A. Owner will not make final payment or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.05 Interest

A. All amounts not paid when due will bear interest at the allowed by law at the place of the Project.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 Contents

- A. The Contract Documents consist of all of the following:
 - 1. This Agreement.
 - 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
 - 3. General Conditions.
 - 4. Supplementary Conditions.

- 5. Specifications as listed in the table of contents of the project manual (copy of list attached).
- Drawings (not attached but incorporated by reference) consisting of 57 sheets with each sheet bearing the following general title: BMU Raw & Treated Water Pipelines – Phase
- 8. Addenda (numbers [number] to [number], inclusive).
- 9. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid
- 10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
 - e. Warranty Bond.
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 Contractor's Representations

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - Contractor has examined and carefully studied the Contract Documents, including Addenda.
 - Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.

- Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
- 6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
- 7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- 8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- 9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- 10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - "collusive practice" means a scheme or arrangement between two or more Bidders, with
 or without the knowledge of Owner, a purpose of which is to establish Bid prices at
 artificial, non-competitive levels; and

BMU RAW & TREATED WATER PIPELINES – PHASE 1 BROOKINGS, SOUTH DAKOTA

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 Standard General Conditions

A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on **[indicate date on which Contract becomes effective]** (which is the Effective Date of the Contract).

Owner:	Contractor:		
(typed or printed name of organization)	(typed or printed name of organization)		
By:	By:		
(individual's signature)	(individual's signature)		
Date:	Date:		
(date signed)	(date signed)		
Name:	Name:		
(typed or printed)	(typed or printed)		
Title:	Title:		
(typed or printed)	(typed or printed) (If [Type of Entity] is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)		
Attest:	Attest:		
(individual's signature)	(individual's signature)		
Title:	Title:		
(typed or printed) Address for giving notices:	(typed or printed) Address for giving notices:		
Designated Representative:	Designated Representative:		
Name:	Name:		
(typed or printed)	(typed or printed)		
Title:	Title:		
(typed or printed) Address:	(typed or printed) Address:		
Phone:	Phone:		
Email:	Email:		
(If [Type of Entity] is a corporation, attach evidence of	License No.:		
authority to sign. If [Type of Entity] is a public body,	(where applicable)		
attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)	State:		

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION OF WORK AND MATERIALS	QTY	UNIT
1	Mobilization	1	LS
2	Construction Staking	1	LS
3	Traffic Control Signs	1,012	SF
4	Traffic Control, Miscellaneous	1	LS
5	Type II Barricade	5	Each
6	Type III Barricade, 8' Single Sided	27	Each
7	Sweeping	4	Hr
8	Remove Curb and Gutter	158	LF
9	Remove Concrete Pavement	24	SY
10	Remove Bituminous Surfacing	1,474	SY
11	8-Inch Scarify and Recompact	1,760	SY
12	Unclassified Excavation	760	CY
13	Unclassified Excavation, Digout	60	CY
14	Exploratory Excavation	25	Hr
15	Subbase Foundation Aggregate	100	Ton
16	Placing Contractor Furnish Topsoil	335	CY
17	Adjustment of Valve Box	32	Each
18	Adjust "Owner Furnished" Manhole Frame and Lid	2	Each
19	Erosion Control Blanket	1,003	SY
20	Sediment Control at Type S Reinforced Concrete Drop Inlet	4	Each
21	Construction Entrance	3	Each
22	Concrete Washout Area	1	Each
23	Manhole Construction Plate Marker	2	Each
24	Base Course	1,330	Ton
25	Geotextile Fabric	1,760	SY
26	Asphalt Concrete	395	Ton
27	Concrete Curb and Gutter	158	LF
28	Concrete Fillet Section, 8" Thick	21	SY
29	Seeding	507	Lb
30	Fertilizer	125	Lb
31	Hydro-Mulching	1.8	Ton
32	30" Steel Encasement Pipe	201	LF
33	Bore and Jack 30" Steel Casing Pipe	361	LF
34	2" DIA. HDPE Encasement Pipe (HDD)	562	LF
35	6" DIA. HDPE Encasement Pipe (HDD)	562	LF
36	Remove Watermain	247	LF
37	Remove Valve & Box	5	Each
38	Remove Fire Hydrant	1	Each

	<u>, </u>		
39	6" Pipe Bedding Material	143	LF
40	8" Pipe Bedding Material	320	LF
41	12" Pipe Badding Material	120	LF
42	16" Pipe Bedding Material	65	LF
43	20" Pipe Bedding Material	5,359	LF
44	Trench Stabilization Material	200	Ton
45	Imported Trench Backfill	1,600	Ton
46	6" PVC Watermain	174	LF
47	8" PVC Watermain	798	LF
48	12" PVC Watermain	127	LF
49	16" PVC Watermain	65	LF
50	20" PVC Watermain	5298	LF
51	20" R.J. PVC Watermain Pipe	602	LF
52	Tracer Wire	7,064	LF
53	8" MJ Bend (11.25 Degree) w/ Joint Restraints	1	Each
54	20" MJ Bend (11.25 Degree) w/ Joint Restraints	2	Each
55	8" MJ Bend (22.5 Degree) w/ Joint Restraints	2	Each
56	20" MJ Bend (22.5 Degree) w/ Joint Restraints	2	Each
57	8" MJ Bend (90 Degree) w/ Joint Restraints	1	Each
58	20" MJ Bend (90 Degree) w/ Joint Restraints	1	Each
59	12" MJ Plug w/ Joint Restraints	1	Each
60	16" MJ Plug w/ Joint Restraints	1	Each
61	6" MJ Cap w/ Joint Restraints	1	Each
62	8" MJ Cap w/ Joint Restraints	3	Each
63	20" MJ Cap w/ Joint Restraints	1	Each
64	8" x 6" MJ Tee w/ Joint Restraints	3	Each
65	12" x 6" MJ Tee w/ Joint Restraints	1	Each
66	12" x 8" MJ Tee w/ Joint Restraints	1	Each
67	16" x 6" MJ Tee w/ Joint Restraints	1	Each
68	20" x 6" MJ Tee w/ Joint Restraints	5	Each
69	20" x 8" MJ Tee w/ Joint Restraints	5	Each
70	20" x 12" MJ Tee w/ Joint Restraints	1	Each
71	20" x 16" MJ Tee w/ Joint Restraints	1	Each
72	20" x 20" MJ Tee w/ Joint Restraints	2	Each
73	8" x 6" MJ Reducer w/ Joint Restraints	1	Each
74	20" x 8" MJ Reducer w/ Joint Restraints	2	Each
75	20" x 12" MJ Reducer w/ Joint Restraints	1	Each
76	6" Foster Adaptor	1	Each
77	20" MJ Anchor Couplings w/ Joint Restraints	6	Each

78	8" MJ Sleeve w/ Joint Restraints	3	Each
79	20" MJ Sleeve w/ Joint Restraints	2	Each
80	6" MJ Gate Valve & Box W/ Joint Restraints	12	Each
81	8" MJ Gate Valve & Box W/ Joint Restraints	8	Each
82	12" MJ Gate Valve & Box W/ Joint Restraints	2	Each
83	16" MJ Gate Valve & Box W/ Joint Restraints	1	Each
84	20" MJ Gate Valve & Box W/ Joint Restraints	9	Each
85	Fire Hydrant w/ Joint Restraints (7' 6" Depth)	11	Each
86	12" D.I. M.J. Cap w/ Blowoff Assembly	1	Each
87	Temporary Water Main Bypass Pipe	1	LS
88	Trench Dewatering	1	LS
89	Dewatering Discharge Pipe	9,500	LF



TILE: BMU RAW & TREATED WATER PIPELINES - PHASE I ESTIMATE OF QUANTITIES

PROFESSIONAL PROFE

JOB No.: 23627.00.01
DATE: FEBRUARY 2022
ENG / ARCH: JDB
DESIGNER: JDB
TECHNICIAN: AME

SCALE REDUCTION B

B-1

TRAFFIC CONTROL

TRAFFIC CONTROL - GENERAL

BARRICADE AND WARNING SIGNS SHALL BE PROVIDED, ERECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 01 0000 OF THE PROJECT MANUAL AND AS SHOWN ON THE DRAWINGS. SIGNS AND BARRICADES THAT ARE PERIODICALLY REQUIRED TO BE MOVED, DUE TO CONSTRUCTION OPERATIONS, SHALL BE PLACED AT LOCATIONS WHERE THEY GIVE SUFFICIENT WARNING TO MOTORISTS AND PEDESTRIANS OF THE CONDITIONS AHEAD AND SHALL BE RELOCATED AS NEEDED TO KEEP SIGNING CURRENT AT REQUIRED LOCATIONS

THE CONTRACTOR SHALL PROTECT AND RESTRICT ALL PEDESTRIANS FROM WORK AREAS OPEN EXCAVATIONS SHALL BE COVERED OR BARRICADED.

WHEN PROVIDED, TRUCK CROSSING SIGNS WILL BE USED AT LOCATION AS SHOWN ON THE PLANS AND/OR AS DETERMINED IN THE FIELD.

EROSION CONTROL

EROSION CONTROL - GENERAL

EROSION AND SEDIMENT CONTROL SHALL BE IN STRICT ACCORDANCE WITH SD DANK RULES AND REGULATIONS

TO CONTROL AND PREVENT SOIL EROSION AND SEDIMENTATION INTO WATERWAYS, THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN A TEMPORARY EROSION CONTROL SYSTEM IN APPROPRIATE AREAS OF CONSTRUCTION AS SHOWN ON THE DRAWINGS OR DETERMINED IN THE FIELD BY THE OWNER, ENGINEER, AND CONTRACTOR. THE TEMPORARY EROSION CONTROL SYSTEM SHALL REMAIN IN PLACE AND SHALL BE MAINTAINED UNTIL ALL LAND DISTURBING ACTIVITY IS COMPLETED AND SUFFICIENT LANDSCAPING OR VEGETATION EXISTS TO PREVENT ANY RUN-OFF SITUATION FROM THE CONSTRUCTION SITE. PAYMENT FOR THIS SHALL BE INCIDENTAL TO OTHER BID ITEMS.

IMPLEMENTATION OF THE EROSION CONTROL SYSTEM PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THE SYSTEM IS THE RESPONSIBILITY OF THE OWNER/ENGINEER AND CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND VEGETATION/LANDSCAPING IS ESTABLISHED.

ALL EROSION CONTROL METHODS SHOWN ON THE DRAWINGS ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING CONSTRUCTION, EROSION CONTROL SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.

EROSION CONTROL SYSTEM SHALL BE INSPECTED DAILY AND AFTER EACH SIGNIFICANT STORM EVENT BY THE RESIDENT PROJECT REPRESENTATIVE FOR THE OWNER AND THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THE EROSION CONTROL SYSTEM'S CONTINUED FUNCTIONING.

AT A MINIMUM, EROSION CONTROL WATTLES, BLANKETS, AND SILT FENCES SHALL BE INSTALLED AT LOCATIONS AS SHOWN ON THE DRAWINGS. FIELD CONDITIONS MAY DEPICT UPGRADING SAID QUANTITIES TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE CONSTRUCTION SITE.

THE CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL SYSTEM WHICH INCLUDES MUCKING AND REPAIR AS DETERMINED BY EROSION CONTROL INSPECTIONS FOR THE DURATION OF THE CONSTRUCTION PROJECT. COSTS ASSOCIATED WITH MUCKING AND REPAIR SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR "SILT FENCE".

THE CONTRACTOR SHALL REMOVE THE EROSION CONTROL WATTLES AND SILT FENCE FROM THE PROJECT ONCE VEGETATION/LANDSCAPING IS ESTABLISHED. COSTS ASSOCIATED WITH REMOVAL SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR "SILT FENCE" OR "EROSION CONTROL WATTLES". REMOVAL WILL BE CONSIDERED A "WARRANTY" ITEM AT WHICH TIME THE CONTRACTOR SHALL REMOVE FROM THE CONSTRUCTION SITE.

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN SURFACE DRAINAGE IN A MANNER TO MATCH THE EXISTING DRAINAGE CONDITIONS.

STREET SWEEPING

VEHICLE TRACKING OF SEDIMENT FROM THE CONSTRUCTION SITE SHALL BE MINIMIZED. STREET SWEEPING SHALL BE USED IF EROSION AND SEDIMENT CONTROL BEST PRACTICES ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET.

THE CONTRACTOR SHALL USE A PICKUP BROOM HAVING INTEGRAL SELF-CONTAINED STORAGE TO CLEAN THE ROADWAY OR ENGINEER APPROVED EQUAL. THE PICKUP BROOM USED SHALL BE A MINIMUM OF 6 FEET WIDE AND HAVE WORKING GUTTER BROOMS.

AT A MINIMUM, SWEEPING WILL BE REQUIRED:

- 1. PRIOR TO OPENING ANY SEGMENT OR ROADWAY TO TRAFFIC.
- 2. AS REQUESTED BY THE OWNER OR ENGINEER.

ALL COSTS FOR CLEANING THE ROADWAY WITH A PICKUP BROOM SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICE PER HOUR FOR "SWEEPING".

CONSTRUCTION ENTRANCE

THE CONTRACTOR SHALL INSTALL A CONSTRUCTION ENTRANCE AT LOCATIONS WHERE THERE IS A POTENTIAL FOR MUD TRACKING AND SEDIMENT FLOW FROM THE CONSTRUCTION SITE AND WORK AREA ONTO A PAVED PUBLIC ROADWAY.

THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION ENTRANCE SUCH THAT MUD TRACKING AND SEDIMENT FLOW WILL NOT ENTER THE ROADWAY OR ADJACENT DRAINAGE AREAS. THE CONSTRUCTION ENTRANCE SHALL BE ROUTINELY INSPECTED AND THE CONTRACTOR SHALL REPAIR OR REPLACE MATERIAL AS DEEMED NECESSARY BY THE ENGINEER.

ALL COSTS FOR FURNISHING, INSTALLING, MAINTAINING, AND REMOVAL OF THE CONSTRUCTION ENTRANCE INCLUDING EQUIPMENT, LABOR, MATERIALS, AND INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR "CONSTRUCITON ENTRANCE"

WATER

WATER - GENERAL

PROJECT DESIGNED USING BMU SPECIFICATIONS DATED FEBRUARY 1, 2022.

ALL WATER MAIN SHALL BE CONSTRUCTED TO BROOKINGS MUNICIPAL UTILITIES WATER STANDARDS AND SPECIFICATIONS.

ALL VALVE OPERATION WILL BE DONE BY BROOKINGS MUNICIPAL UTILITIES.

BEDDING MATERIAL PAID PER LINEAR FOOT OF WATERMAIN PIPE INSTALLED

TRENCHLESS UTILITY INSTALLATION

CONTRACTOR SHALL BE AWARE THAT SUBSURFACE CONDITIONS CONSIST OF SAND AND GRAVEL, INCLUDING, BUT NOT LIMITED TO, ROCKS OF VARIOUS SIZES AND SHAPES.

TRENCH STABILIZATION MATERIAL

AS DIRECTED BY THE OWNER OR ENGINEER, TRENCH STABILIZATION MATERIAL MAY BE NECESSARY ON THE PROJECT TO FURTHER STABILIZE THE TRENCH FOUNDATION PRIOR TO INSTALLATION OF ALL TYPES AND CLASSES OF PIPE ON THE PROJECT. THE CONTRACTOR MAY NOT USE ANY OF THIS MATERIAL ON THE PROJECT WITHOUT PRIOR ANTHORIZATION FROM THE OWNER OR ENGINEER. ANY UNAUTHORIZED USE OF THE MATERIAL WILL NOT BE PAID FOR.

IMPORTED TRENCH BACKFILL

AS DIRECTED BY THE OWNER OR ENGINEER, IMPORTED TRENCH BACKFILL MAY BE NECESSARY ON THE PROJECT IF IT IS DETERMINED THAT THE NATIVE MATERIAL EXCAVATED FROM THE UTILITY TRENCH IS NOT SUITABLE FOR BACKFILL. THE CONTRACTOR MAY NOT USE ANY OF THIS MATERIAL ON THE PROJECT WITHOUT PRIOR AUTHORIZATION FROM THE OWNER OR ENGINEER. ANY UNAUTHORIZED USE OF THE MATERIAL WILL NOT BE PAID FOR.

CONNECT TO EXISTING WATER MAIN

THE CONTRACTOR SHALL CONNECT TO AN EXISTING WATER MAIN, AT THE LOCATIONS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ELEVATIONS OF ALL CONNECTION POINTS TO EXISTING WATERMAIN. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FITTINGS TO CONNECT TO EXISTING WATERMAIN.

POTABLE WATER

ANY POTABLE WATER REQUIRED FOR BMU FACILITIES, SUCH AS HYDRO TESTING, DISINFECTION, FLUSHING, ETC.; SHALL BE SUPPLIED BY BMU VIA HYDRANTS, ETC.. ONE TIME AT NO COST TO THE CONTRACTOR. ANY WATER NEEDED FOR ANY ADDITIONAL HYDRO TESTING, DISINFECTIONS, FLUSHING, ETC., SHALL BE BILLED TO THE CONTRACTOR. CONTACT MARK KUECHENMEISTER (605-691-1252) FOR APPROVED METHODS FOR ACQUIRING POTABLE WATER.

UTILITY TRENCH COMPACTION TESTING

ALL UTILITY TRENCH COMPACTION TESTING SHALL BE DONE BY AN INDEPENDENT TESTING AGENCY. THE ENGINEER SHALL PAY FOR ALL PASSING COMPACTION TESTS. THE CONTRACTOR SHALL BE BILLED FOR ANY RETESTING OF COMPACTION TESTS WHICH HAVE FAILED PER THE SPECIFICATIONS.

ALL UTILITY TRENCH COMPACTION TESTING WITHIN THE PROPOSED ROADWAY SHALL MEET THE REQUIREMENTS AS SET FORTH IN SDDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES SECTION 120 ROADWAY AND DRAINAGE EXCAVATION AND EMBANKMENT.

DISCHARGE OF CHLORINATED WATER

CONTRACTOR SHALL PROVIDE A DECHLORINATION PLAN FOR APPROVAL PRIOR TO THE DISCHARGING OF CHLORINATED WATER FROM THE DISTRIBUTION SYSTEM.

WATER FROM THE CITY'S WATER DISTRIBUTION SYSTEM THAT IS DRAINED INTO WORK AREAS OR OPEN TRENCHES MUST BE DISCHARGED WITHOUT IMPACT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REVIEW LOCATIONS OF DISCHARGE HYDRANTS RELATIVE TO OPEN AREAS AND SHALL MEET WITH PROPERTY OWNERS TO DISCUSS DISCHARGE LOCATIONS AND OBTAIN PROPERTY OWNER APPROVAL IF WATER WILL BE DISCHARGED ACROSS THEIR PRIVATE PROPERTY. THE FOLLOWING IS A PRIORITIZED LIST FOR THE DISPOSITION OF CHLORINATED OR HEAVILY CHLORINATED WATER FROM THE DISTRIBUTION SYSTEM:

- a. IF THE DISCHARGE LOCATION IS CLOSE TO WATERS OF THE STATE, DISCUSS EXCAVATION OF DEPRESSIONS OR BERMS (BMP'S) WITH THE CITY AND PROPERTY OWNER(S) TO ACCOMMODATE DISCHARGE VOLUMES. WATER FROM THE DISTRIBUTION SYSTEM SHALL BE PUMPED OR FLUSHED TO THESE BMP'S AND SHALL BE STORED AND DISCHARGED THROUGH INFILTRATION. OVERLAND FLOW IS NOT ALLOWED.
- b. WATER FROM THE DISTRIBUTION SYSTEM MAY BE PUMPED INTO VACTOR TRUCKS OR SEPTIC TANK TRUCKS AND HAULED TO THE WATER RECLAMATION PLANT OR OTHER FACILITY PERMITTED BY (DANR) TO ACCEPT SUCH DISCHARGE.
- C. PERMISSION MUST BE OBTAINED BY THE CITY FOR THE DISCHARGE OF WATER FROM THE DISTRIBUTION SYSTEM INTO CITY'S SANITARY SEWER SYSTEM. CONTRACTOR IS RESPONSIBLE FOR VERIFYING HYDRAULIC LOADING ON EXISTING SANITARY SEWER SYSTEM DURING TRENCH DEWATERING OPERATIONS TO ENSURE THAT SEWER BACKUPS DO NOT OCCUR.

DISCHARGE OF CHLORINATED WATER SHALL BE THE RESPONSIBILITY OF BROOKINGS MUNICIPAL UTILITIES.

COORDINATION

ALL INSTALLATION AND REMOVAL OF WATERMAIN SHALL BE COORDINATED WITH BROOKINGS MUNICIPAL UTILITIES.

DEWATERIN

IT IS ANTICIPATED THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION. DEWATERING SHALL BE PAID FOR UNDER THE LUMP SUM BID ITEM "TRENCH DEWATERING" AND SHALL BE FULL COMPENSATION FOR ALL PERMITS, MATERIALS, EQUIPMENT, AND LABOR NEEDED TO PERFORM THE WORK.

THE CONTRACTOR WILL OBTAIN A DEWATERING PERMIT FROM THE DANR.

BATTLE BATTLE BATTLE BATTLE Community

TREATED WATER PIPELINES - PHASE GENERAL NOTES

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RAW

BMU

PROFESSIONAL TAILS IN THE PROFESSIONAL TAILS

JOB No.: 23627.00.01 DATE: FEBRUARY 2022

JOB No.: 23627.00.01

DATE: FEBRUARY 2022

ENG / ARCH: JDB

DESIGNER: JDB

TECHNICIAN: AME

SHEET No. :

D-2

SEQUENCING PLAN:

THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH BOWES CONSTRUCTION INC., THE PRIME CONTRACTOR FOR THE 20TH STREET S INTERCHANGE PROJECT. CONTACT: AUSTIN GEE PHONE: 605-693-3557

PHASE 1A - STA. 27+25 TO 32+15

- NOTIFY THE OWNER AND ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE COMMENCEMENT OF
- INSTALL BORE & JACK CASING UNDERNEATH INTERSTATE 29 AND OPEN CUT CASING ACROSS FUTURE ON-RAMP.

PHASE 1B - STA. 1+00 TO 4+00

- NOTIFY THE OWNER AND ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE COMMENCEMENT OF
- INSTALL TEMPORARY TRAFFIC CONTROL AND DETOUR SIGNAGE.
- CLOSE 22ND AVENUE S AND 20TH STREET S INTERSECTION. CONTRACTOR SHALL PROVIDE CONSTRUCTION ACCESS FOR BOWES CONSTRUCTION FOR 20TH STREET S INTERCHANGE PROJECT.
- PERFORM SURFACING REMOVALS.
- INSTALL TEMPORARY WATERMAIN BYPASS.
- PERFORM UNDERGROUND UTILITY REMOVALS AND INSTALL WATERMAIN THROUGH THE 22ND AVENUE
- PRESSURE TEST AND DISINFECT NEW WATERMAIN.
- PREPARE SUBGRADE, INSTALL BASE COURSE, INSTALL CURB & GUTTER AND FILLET SECTION.
- COMPLETE ASPHALT PAVING.
- COMPLETE SEEDING AND SURFACE RESTORATION.
- REMOVE TEMPORARY TRAFFIC CONTROL AND DETOUR SIGNAGE.

PHASE 1C - STA, 4+00 TO 32+15

- NOTIFY THE OWNER AND ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE COMMENCEMENT OF
- INSTALL WATERMAIN AND RESTRAINED JOINT WATERMAIN THROUGH STEEL CASING PIPE.
- PRESSURE TEST AND DISINFECT NEW WATERMAIN.
- COMPLETE SEEDING AND SURFACE RESTORATION.

PHASE 1D - STA. 32+15 TO 60+00

- NOTIFY THE OWNER AND ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE COMMENCEMENT OF
- INSTALL TEMPORARY TRAFFIC CONTROL AND DETOUR SIGNAGE
- CLOSE 34TH AVENUE S AND 20TH STREET S INTERSECTION. CONTRACTOR SHALL PROVIDE CONSTRUCTION ACCESS FOR BOWES CONSTRUCTION FOR 20TH STREET S INTERCHANGE PROJECT.
- PERFORM SURFACING REMOVALS.
- INSTALL WATERMAIN THROUGH 34THAVENUE INTERSECTION AND FUTURE TURNING LANE.
- PRESSURE TEST AND DISINFECT NEW WATERMAIN.
- PREPARE SUBGRADE, INSTALL BASE COURSE, INSTALL CURB & GUTTER AND FILLET SECTION.
- COMPLETE ASPHALT PAVING.
- COMPLETE SEEDING AND SURFACE RESTORATION.
- REMOVE TEMPORARY TRAFFIC CONTROL AND DETOUR SIGNAGE.

TIME PROVISIONS

THE CONTRACTOR WILL COMMENCE WORK UNDER THIS CONTRACT AND SUBSTANTIALLY COMPLETE ALL WORK BY NOVEMBER 4, 2022. SUBSTANTIALLY COMPLETE IS DEFINED AS WORK COMPLETE INCLUDING BUT NOT LIMITED TO ALL UNDERGROUND UTILITY WORK, SUBGRADE PREPARATION, CURB AND GUTTER INSTALLATION, ASPHALT PAVING. ALL UNDERGOUND UTILITIES MUST BE OPEN FOR SERVICE. ALL STREETS MUST BE OPEN FOR TRAFFIC. THE CONTRACTOR FURTHER AGREES TO PAY AS LIQUIDATED DAMAGES THE AMOUNT SPECIFIED IN THE AGREEMENT FOR EACH WORKING DAY THEREAFTER THAT THE WORK REMAINS INCOMPLETE.

INTERIM COMPLETION: THE CONTRACTOR WILL COMMENCE WORK UNDER THIS CONTRACT AND COMPLETE ALL WORK ON PHASE 1A BY MAY 13, 2022. THE WORK WILL BE CONSIDERED COMPLETE WHEN ALL STEEL CASING IS INSTALLED. THE CONTRACTOR FURTHER AGREES TO PAY AS LIQUIDATED DAMAGES AS SPECIFIED IN THE AGREEMENT.

INTERIM COMPLETION: THE CONTRACTOR WILL COMMENCE WORK UNDER THIS CONTRACT AND COMPLETE ALL WORK ON PHASE 1B WITHIN 45 CALENDAR DAYS. CALENDAR DAY COUNT WILL START ON THE DATE TRAFFIC CONTROL IS SETUP. THE WORK WILL BE CONSIDERED COMPLETE WHEN THE WATERMAIN IS INSTALLED, PRESSURE TESTED, DISINFECTED, AND OPEN FOR SERVICE, AND ALL STREETS ARE PAVED AND FULLY OPEN TO TRAFFIC. THE CONTRACTOR FURTHER AGREES TO PAY AS LIQUIDATED DAMAGES AS SPECIFIED IN THE AGREEMENT.

INTERIM COMPLETION: THE CONTRACTOR WILL COMMENCE WORK UNDER THIS CONTRACT AND COMPLETE ALL WORK WITHIN THE 34TH AVENUE S RIGHT-OF-WAY WITHIN 30 CALENDAR DAYS. CALENDAR DAY COUNT WILL START ON THE DATE TRAFFIC CONTROL IS SETUP. THE WORK WILL BE CONSIDERED COMPLETE WHEN THE WATERMAIN IS INSTALLED, PRESSURE TESTED, DISINFECTED, AND OPEN FOR SERVICE, AND ALL STREETS ARE PAVED AND FULLY OPEN TO TRAFFIC. THE CONTRACTOR FURTHER AGREES TO PAY AS LIQUIDATED DAMAGES AS SPECIFIED IN THE AGREEMENT.

PHASE TREATED WATER PIPELINES -∞ RAW

BMU

SEQUENCING PLAN

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JOB No.:	2362	27.00.01	
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0	1/2"		1"

D-4





IT IS ANTICIPATED THAT GROUDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION. DEWATERING SHALL BE PAID FOR UNDER THE LUMP SUM BID ITEM "TRENCH DEWATERING" AND SHALL BE FULL COMPENSATION FOR ALL PERMITS, MATERIALS, EQUIPMENT AND LABOR NEEDED TO PERFORM THE WORK. DEWATERING DISCHARGE PIPE SHALL BE PAID FOR UNDER THE BID ITEM "DEWATERING DISCHARGE PIPE" AND SHALL BE FULL COMPENSATION FOR MATERIALS, EQUIPMENT, AND LABOR NEEDED TO PERFORM THE WORK.

THE MAXIMUM SIZE ALLOWABLE DEWATERING DISCHARGE PIPE WILL BE 18" DIA. PIPE. THE DEWATERING DISCHARGE PIPE SHALL NOT AFFECT THE SURFACE DRAINAGE THROUGH THE PROPOSED STORM SEWER PIPE AT ANY TIME. THE CONTRACTOR SHALL COORDINATE THE PLACEMENT OF THE DEWATERING DISCHARGE PIPE WITH THE OWNER AND SDDOT.

THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN THAT INCLUDES THE PROCESS, MATERIAL AND LABOR NEEDED TO PERFORM THE WORK AND COORDINATE THE DISCHARGE LOCATIONS WITH THE ENGINEER TWO WEEKS PRIOR TO THE WORK BEGINNING.

THE CONTRACTOR WILL OBTAIN A DEWATERING PERMIT FROM THE DANR.

THE CONTRACTOR SHALL INSTALL THE DEWATERING DISCHARGE PIPE ACROSS 34TH AVENUE S. TO DEER CREEK ALL PERMITS, MATERIAL, EQUIPMENT AND LABOR NEEDED TO PERFORM THE WORK SHALL BE PAID FOR UNDER THE LUMP SUM BID ITEM "TRENCH DEWATERING."

THE CONTRACTOR SHALL PROVIDE A PASSABLE ROADWAY WITH TEMPORARY SURFACING THE SAME DAY, AND SHALL RESURFACE THE EXISTING ROADWAY WITHIN 3 WORKING DAYS IF THE DEWATERING DISCHARGE PIPE IS INSTALL BY THE OPEN-CUT METHOD. THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL NEEDED FOR THE CLOSURE WHICH WILL BE PAID FOR UNDER THE LUMP SUM BID ITEM "TRENCH DEWATERING."

THE CONTRACTOR SHALL COORDINATE WITH BROOKINGS COUNTY HIGHWAY DEPARTMENT WITH THE INSTALL OF THE DISCHARGE PIPE ACROSS THE INTERSECTION.

engineering a better community

BMU RAW & TREATED WATER PIPELINES - PHASE DEWATERING PLAN

JOB No.: 23627.00.01

DATE: FEBRUARY 2022

ENG / ARCH: JOB

DESIGNER: JDB

TECHNICIAN: AME

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THE CONTRACTOR WILL OBTAIN A DEWATERING DISCHARGE PERMIT FROM THE SDDOT.