CITY OF DULUTH
PURCHASING DIVISION
Room 100 City Hall
411 West First Street
Duluth, Minnesota 55802-1199
218/730-5340 218/730-5922 FAX
purchasing@duluthmn.gov

Addendum # 1
Bid # 22-99384
Project: Michigan Street Utility Reconstruction from 1st Ave. West to 3rd Ave. East

This addendum serves to notify all bidders of the following changes to the solicitation documents:

PROPOSAL PACKAGE

1) **CORRECTION:** Please ignore the incorrect bid date listed as May 4th on the cover page of the proposal package. The correct date for bid opening is May 12th as listed in the Invitation to Bids document.

2) **REVISED:** Exhibit A for the project has been revised to incorporate additional items, the changes will be reflected in the electronic bid tabulation.

3) **ADD:** The project insurance requirements shall also include listing Minnesota Power, an Allete Company as an additional insured party to the same coverage requirements as the City of Duluth.

SPECIAL PROVISIONS

1) **ADD** the following paragraph to SP-10 (1505) COPPERATION BY CONTRACTORS:

"C. Minnesota Power Staff or Contractors will be working to temporarily relocate the park ramp access and exit automated gate operators. Contractor shall coordinate timing of the re-configuration, and suitable locations for the devices based upon locations of access ramps, trenches, etc. The Contractor shall coordinate permanent restoration with the installation of new permanent automated gate operators by Minnesota Power in the pre-construction location. "

2) **ADD:** SP 33 paragraph below:

"SP-33 (2504) WATERMAIN INSPECTIONSPECIAL

The Contractor shall provide a CCTV pipeline inspection of approximately 70 feet of existing 20" HDPE watermain located in the 1st Avenue West intersection. The purpose of the inspection is to send a camera up the pipeline and investigate an existing 20" butterfly valve W23971 which won't fully open. The inspection will include looking for obstructions, interference with the HDPE MJ adapter or the stiffener, and/or observing valve operation. The City of Duluth will provide the necessary pipeline shutdowns and operate valves to facilitate inspection.

Inspection access into the pipeline will occur at the Phase 1 water main connection location to the existing system. Prior to connecting the newly assembled Phase 1 segment of water main the Contractor must facilitate a schedule and access for this inspection to occur.

The Contractor or inspection vendor shall provide closed circuit televising equipment that completely disinfected and intended for use in potable water systems. The vendor must produce a digital inspection video to provide to the City of Duluth. If possible, the inspection may be asked to pass through the open valve and review the opposite MJ adapter, therefore the camera system should be capable of traveling through a 6" pipe opening.

Payment for the inspection will be one lump sum payment for successful inspection of the 20" water main to the valve and it's internal connection. "

3) **ADD:** SP-36 paragraph below:

"SP-36 WATERPROOFING

Vault wall waterproofing shall be constructed with a Bentonite Geotextile Waterproofing System. The low permeability hydrophilic waterproof membrane shall contain 1 pound of sodium bentonite per square foot of geotextile material. The membrane shall be installed between the existing walls or new CMU surfaces and the low density concrete which will be used to fill in the vault. Installation shall be per manufactures recommendations. Acceptable manufactures are Voltex by CETCO or engineer approved equal. Payment for waterproofing shall be made by the square foot of vertical or horizontal surfaces where waterproofing is installed. "

4) **ADD:** the following paragraph to SP-26 (2505) PE GAS MAIN & SERVICES

"F. <u>TEMPORARY GAS SERVICES</u>

The Contractor shall route a temporary 1" MDPE shared gas service overland on the elevated walkway as indicated in the plans. Portions of the gas main accessible by the general public shall be inserted into a protective steel conduit and adequately

supported. This specifically includes but it not limited to the vertical risers where the temporary pipe will exit the ground and run up the side of the concrete walk pillars. "

5) **ADD:** SP-30.1 paragraph below:

"SP-30.1 TEMPORARY ACCESS RAMPS

Temporary access ramps constructed of Class 5 shall be installed to provide access into the following:

- Minnesota Power Ramp
- Weiland Block Parking Garage
- 230 East Superior Street's Parking Lot

The temporary access ramps shall provide smooth transition over curbs and compensate for grades appropriately as such to be navigable by a typical passenger car. The temporary ramps shall provide a driving surface at least 10 feet wide. The Contractor shall protect existing and new pavement from the ramp materials by laying down a layer of geofabric. Contractor will be required to cut grades and sub-cut in landscaped areas to make suitable grade changes for the temporary ramp. Where the ramp traverses a gutter, a small conduit may be used for a culvert in the flow line. Temporary access ramps shall be completely removed once no longer necessary and these areas restored back to the original condition. Payment for the temporary ramps shall be made with the Aggregate Base Class 5 bid item by the ton. "

6) **ADD** SP-35 paragraph below:

"**SP-35 (2104) REMOVE VAULT ROOF**

This work consists of removal and disposal of existing cast-in-place concrete or brick arch vault roofs, vault roof knee walls and portions of vault exterior walls as detailed in the Plan. Work shall be performed in accordance with MnDOT 2104 and in accordance with the following:

A. CONSTRUCTION REQUIREMENTS

Contractor shall inspect vault for all utilities within and coordinate with Engineer and building owner for any removal/relocation requirements. Utility removal or relocations shall be performed by others, or by Contractor if so directed by Engineer as Extra Work, prior to the removal of vault roof. During roof removal activities, Contractor shall work around, and protect, existing utilities which are to remain. Any damage to existing utilities to remain shall be repaired at no cost to the City or building owner.

The existing vault roof shall be removed enough to create sufficient openings for filling the vault to with the low density concrete in it's entirety. The existing vault roof is brick arch and steel construction, and extents of removal will be directed by the engineer.

Full depth sawcutting of vault roof will be required where vault roof removal is a partial roof removal or vault to be removed is adjacent to a vault to remain in service with a common roof support wall or beam. Prior to sawcutting, the Contractor shall coordinate location of sawcut

with Engineer.

Remove the vault roof adjacent to buildings in a manner as to not damage the existing building. Any damage to the existing building shall be repaired at no cost to the City.

Upon initiating vault roof removal, and until such time that the concrete block infill walls are built, the Contractor shall have full responsibility for securing building from access through any vault openings. Protective, locked barriers of substantial construction (steel plates, etc.) shall be provided and in place at all times except when work is actively being performed within the vault.

Until such time that the new roof is installed, Contractor shall keep the vault covered to keep rain or on-site water from entering the vault and potentially the building.

B. METHOD OF MEASUREMENT & BASIS OF PAYMENT

Measurement will be by the projected horizontal surface area of removed vault roof for payment by the square foot. No separate measurement will be made for knee wall removal, beam removal, coordination of vault utility removals, other miscellaneous removals or protective barriers. Payment shall be made under Item 2104.618 (REMOVE VAULT ROOF) at the Contract bid price per square foot and shall compensate in full for all costs for the removal of vault roof, including, but not limited to all labor, equipment, sawcutting, disposal, and protective barriers required to complete the work. “

7) **ADD** SP-37 paragraph below:

“

SP-37 (2411) CONTROL DENSITY HYDRAULIC FILL

This work consists of furnishing and placement of Control Density Hydraulic Fill into existing building vaults designated to be filled. Work shall be performed in accordance with MnDOT Specifications 2411, 2461 and the following:

A. MATERIALS

Control Density Hydraulic Fill:

1) Flowable cementitious fill with a compressive strength of 450 psi (+/- 50 psi).
   a) SUBMITTALS
      i) Control Density Hydraulic Fill mix design.

CONSTRUCTION REQUIREMENTS

Prior to placement of Control Density Hydraulic Fill:

1) Vault roof shall be removed per REMOVE VAULT ROOF Special Provision
2) Opening between vault and adjoining building shall be infilled per CONCRETE MASONRY WALL Special Provision
3) Waterproofing shall be applied to building walls per WATERPROOFING Special Provision
4) Control Density Hydraulic Fill shall be placed in maximum 3-foot lifts with maximum 1 lift per vault any calendar day.

METHOD OF MEASUREMENT & BASIS OF PAYMENT

Measurement will be by the cubic yard volume of Control Density Hydraulic Fill placed, based on the field dimensions as measured prior to placement. Payment shall be made under Item 2411.607 (CONTROL DENSITY HYDRAULIC FILL) at the Contract bid price per cubic yard. Payment shall compensate in full for all costs required to fill vault including, but not limited to all labor, equipment and materials

8) **ADD** SP-38 paragraph below:

"SP-38 (2411) CONCRETE MASONRY WALL

This work consists of construction of Concrete Masonry Unit (CMU) infill walls at building faces where vaults are to be filled. Work shall be performed in accordance with MnDOT Specification 2411 and as follows:

A. MATERIALS

(1) Concrete Masonry Unit Blocks

2) Concrete Masonry Units shall conform to the requirements of ASTM C90 and shall be 16x12x8 standard blocks

(1) Mortar:

3) Mortar shall conform to the requirements of MnDOT 3107
4) Type S Mortar

(1) Bond Beam Masonry Unit Blocks

5) Concrete Masonry Units shall conform to the requirements of ASTM C90 and shall be 16x12x8 blocks

(1) Concrete

6) MnDOT Mix 3G52

(1) Reinforcement:

7) Per MnDOT Specification 3301

(1) Single Whyte Reinforcement

8) Galvanized per MnDOT Specification 3392
9) 9 Gauge Wire
10) Material
11) Wire-Bond – Series 200 Ladder Mesh
    i) Hohmann & Barnard, Inc. - #220 Ladder Mesh
    ii) Approved Alternatives
12) Zinc Rich Primer:
    a) BASF MasterProtect P 8100 AP
    b) SIKA Zinc Rich -1
    c) Approved Alternative
13) Reinforcement Anchoring Material
    a) Per MnDOT Approved/Qualified List "Concrete anchorages - reinforcing bar applications"
        (1) Product Data:
            (a) Mortar
    b) Zinc Rich Primer
    c) Dowel Anchorage Material
    d) Single Whyte Reinforcement
    e) Concrete Masonry Unit Blocks
    f) Bond Beam Masonry Unit Blocks

B. CONSTRUCTION REQUIREMENTS

(1) Preparation of vault opening prior to construction of concrete masonry wall.

2) For walls mating with concrete, grind mating surfaces smooth and clean to provide a surface to abut the CMU wall in a fashion to ensure mortar bonding and not allow seepage of control density hydraulic fill.
3) For walls mating with existing stone walls, grind any sharp irregularities and mortar parge smooth any cavities to create a smooth surface to abut the CMU wall in a fashion to ensure mortar bonding and not allow seepage of control density hydraulic fill.

(1) Dowel reinforcement as shown in the Plan into the existing concrete floor and the existing building walls. Install dowels to the depth as detailed in the Plan. Drill hole diameter and preparation shall be in accordance with the Manufacturer's requirements.

C. METHOD OF MEASUREMENT

Measurement shall be by the projected vertical square foot surface area of acceptably constructed Concrete Masonry Wall. Vertical projected face area of encased steel beams will also be measured for payment.

D. BASIS OF PAYMENT

Payment shall be made under Item 2411.618 (CONCRETE MASONRY WALL) at the Contract bid price per square foot. Payment shall compensate in full all costs to construct concrete masonry wall including, but not limited to all labor, equipment, concrete masonry unit blocks, bond beam blocks, mortar, existing building opening preparation, reinforcement and reinforcement anchoring, existing beam cleaning, furnishing and application of zinc rich primer, beam forming, concrete furnishing and placement required to complete the work. "

PLANS

1) **REPLACE** the SEQ Plan Sheet (Sheet No. 2 of 87) with the plan sheet included with this Addendum.

2) **ADD:** The following notes to the SEQ NOTES found on plan sheet 3.

34. Gas valve provided by City, bid item shall include payment for only the valve installation, plus provision and installation of the valve box.
35. Payment for re-installing salvaged castings shall be made with this bid item.
36. This bituminous shall be used for any temporary installations and payment by the ton shall include removal and disposal of bituminous once it is not longer necessary.

Please acknowledge receipt of this Addendum by checking the appropriate box in the Bid Express solicitation.

Posted **5/10/22**

STATEMENT OF ESTIMATED QUANTITIES

LINE	NOTES	SPEC NO	DESCRIPTION	UNIT	GAS FUND 520 ESTIMATED QTY.	WATER FUND 510 ESTIMATED QTY.	MNPOWER QUANTITY	TOTAL PROJECT QUANTITY
1	0	2021.501	MOBILIZATION	LS	0.259	0.618	0.123	1
2		2101.524	CLEARING	TREE		2	2.00	4
3	5	2101.501	GRUBBING	LS	0.25	0.50	0.25	1
4		2104.502	REMOVE HYDRANT	EACH		2		2
5		2104.502	REMOVE MANHOLE OR CATCH BASIN	EACH		3		3
6		2104.502	SALVAGE CASTING	EACH	1	8		9
7	17	2104.503	REMOVE WATER MAIN	LF		1,517		1,517
8		2104.503	REMOVE CURB & GUTTER	LF	283	169		452
9	9	2104.503	REMOVE GAS MAIN	LF	1,538			1,538
10	31	2104.503	REMOVE GAS SUPPLY PIPE	LF	50			50
11		2104.503	REMOVE SEWER PIPE (STORM)	LF		60		60
12	17	2104.503	REMOVE WATER SERVICE PIPE	LF		30		30
13		2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LF		1,223		1,223
14		2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LF	1,107	1,648		2,755
15		2104.502	SALVAGE SIGNS TYPE C	EACH		3		3
16	6,21	2104.502	SALVAGE IMPACT ATTENUATOR	EACH		1		1
17	23	2104.602	REMOVE LIGHT AND FOUNDATION	EACH		2		2
18		2104.609	REMOVE PARKING METER POST	EACH	2	3		5
19		2104.504	REMOVE BITUMINOUS PAVEMENT	SY	224	2,346		2,570
20		2104.518	REMOVE BRICK PAVEMENT	SF	1,728	1,912		3,640
21		2104.504	REMOVE CONCRETE PAVEMENT	SY	712	2,197		2,909
22		2104.504	REMOVE CONCRETE WALK	SF	524	90		614
23		2104.501	REMOVE CHAIN LINK FENCE	LF		75		75
24	1	2104.603	REMOVE CONCRETE BARRIER	LF		236		236
25		2104.618	REMOVE VAULT ROOF	SF	48			48
26	24	2105.507	SELECT GRANULAR BORROW MOD 7% (CV) (P)	CY	99	1,639	49	1,787
27	24	2211.507	AGGREGATE BASE (CV) CLASS 5 (P)	CY	176	515	16	707
28	4	2211.509	AGGREGATE BASE CLASS 5	TON		323		323
29	10	2301.504	CONCRETE PAVEMENT 8.0"	SY	1,217	2,905	147	4,269
30	19	2301.538	DOWEL BAR	EACH	601	1,395	57	2,053
31		2301.602	DRILL & GROUT DOWEL BAR (EPOXY COATED)	EACH	132	121	56	309
32		2301.602	DRILL & GROUT REINF BAR (EPOXY COATED)	EACH	181	521	44	746
33	19, 25	2301.508	SUPPLIMENTAL PAVEMENT REINFORCEMENT	LB	20	120		140
34	26	2301.603	CONCRETE PAVEMENT LUG	EACH	2	2		4
35	35	2331.509	BITUMINOUS PATCHING MIXTURE (SPECIAL)	TON		157		157
36		2360.509	TYPE SP 9.5 WEARING COURSE MIX (3,C)	TON		134	6	140
37		2360.509	TYPE SP 12.5 NON-WEARING COURSE MIX (3,C)	TON		179	8	187
38		2411.602	RECONSTRUCT ROOF - VAULT 28	LS			1	1
39		2411.602	RECONSTRUCT ROOF - VAULT 30	LS			1	1
40		2411.602	RECONSTRUCT ROOF - VAULT 34	LS			1	1
41		2411.602	RECONSTRUCT ROOF - VAULT 35	LS			1	1
42	27	2411.607	CONTROL DENSITY HYDRAULIC FILL	CY	22			22
43		2411.618	CONCRETE MASONRY WALL	SF	70			70
44	15	2451.507	STRUCTURE EXCAVATION CLASS R	CY		20		20
45		2481.618	WATERPROOFING	SF	161			161
46		2503.503	12" RC PIPE SEWER DES 3006 CLASS III	LF		48		48
47		2503.503	15" RC PIPE SEWER DES 3006 CLASS III	LF		15		15
48		2503.602	CONNECT INTO EXISTING STORM SEWER	EACH		1		1
49		2503.602	CONNECT TO EXISTING MANHOLE	EACH		3		3
50		2504.601	TEMPORARY WATER SYSTEM	LS		1		1
51		2504.601	WATER MAIN INSPECTION (SPECIAL)	LS		1		1
52		2504.602	ADJUST VALVE BOX	EACH	2	3		5
53		2504.602	(WATER) TRACER BOX	EACH		16		16
54	2	2504.602	INSTALL 20" BUTTERFLY VALVE AND BOX	EACH		5		5
55	2	2504.602	6" GATE VALVE AND BOX	EACH		7		7
56	2	2504.602	12" GATE VALVE AND BOX	EACH		1		1
57		2504.602	INSTALL 20" X 6" ELECTROFUSION BRANCH SADDLE	EACH		11		11
58		2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH		1		1
59	8	2504.602	CONCRETE ENCASED VALVE BOX COLLAR (SPECIAL)	EACH	2			2
60		2504.602	CONNECT TO EXISTING 20" WATER MAIN	EACH		2		2
61	28	2504.601	CONNECT TO EXISTING 12" WATER MAIN	LS		1		1
62	29	2504.601	CONNECT TO EXISTING 6" WATER MAIN	LS		2		2
63		2504.602	HYDRANT ASSEMBLY	EACH		2		2
64	3	2504.602	RECONNECT HYDRANT (SPECIAL)	EACH		1		1
65	30	2504.602	RECONNECT WATER SERVICE	EACH		7		7
66		2504.603	6" HDPE SDR 11 SERVICE PIPE	LF		10		10
67		2504.603	20" HDPE WATER MAIN SDR 11	LF		1,500		1,500
68		2504.604	3" POLYSTYRENE INSULATION	SF		224		224
69	7	2504.618	1/4" STEEL PLATING PROTECTION	SF	96	96		192

STATEMENT OF ESTIMATED QUANTITIES

LINE	NOTES	SPEC NO	DESCRIPTION	UNIT	GAS FUND 520 ESTIMATED QTY.	WATER FUND 510 ESTIMATED QTY.	MNPOWER QUANTITY	TOTAL PROJECT QUANTITY
70		2505.602	(GAS) TRACER BOX	EACH	1			1
71	34	2505.602	1" PE VALVE AND VALVE BOX	EACH	10			10
72	34	2505.602	2" PE VALVE AND VALVE BOX	EACH	4			4
73		2505.602	3" PE VALVE AND VALVE BOX	EACH	2			2
74	14	2505.602	CONNECT TO GAS MAIN	EACH	4			4
75		2505.602	RECONNECT EXISTING GAS SERVICE	EACH	12			12
76		2505.603	1" PE GAS SERVICE	LF	25			25
77		2505.603	2" MDPE GAS MAIN	LF	740			740
78		2505.603	3" MDPE GAS MAIN	LF	30			30
79		2505.603	12" HDPE GAS MAIN	LF	1,520			1,520
80		2505.602	INSTALL GAS VALVE VAULT	EACH	1			1
81	18	2506.502	CASTING ASSEMBLY	EACH		3		3
82	36	2506.502	ADJUST FRAME AND RING CASTING	EACH	1	8		9
83		2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH		3		3
84		2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	1	11		12
85		2506.602	CONNECT TO EXISTING STRUCTURE	EACH		2		2
86	16	2521.518	4" CONCRETE WALK	SF	2,534			2,534
87	16	2521.518	6" CONCRETE WALK	SF	163	90		253
88	13	2531.503	CONCRETE CURB & GUTTER DESIGN B612	LF	197	11		208
89	13	2531.503	CONCRETE CURB & GUTTER DESIGN B624	LF	86	158		244
90		2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SY	234			234
91		2531.618	TRUNCATED DOMES	SF	16	32		48
92	32	2533.503	CONCRETE MEDIAN BARRIER DESIGN 8303 TYPE A	LF		88		88
93	32	2533.503	CONCRETE MEDIAN BARRIER DESIGN 8303 TYPE A-A	LF		48		48
94	32, 33	2533.603	INSTALL CONCRETE MEDIAN BARRIER	LF		100		100
95		2540.602	PARKING METER POST	EACH	2	3		5
96	22	2540.601	INSTALL LANDSCAPE ROCK	LS		0.5	0.5	1
97		2545.602	ADJUST HANDHOLE	EACH	1			1
98		2545.615	REINSTALL LIGHT AND FOUNDATION	EACH	2	2		4
99		2550.602	CONNECT INTO EXISTING ELECTRICAL MANHOLE	EACH			1	1
100		2550.602	CONNECT INTO EXISTING ELECTRICAL DUCTBANK	EACH			1	1
101		2550.603	DUCT BANK	LF			973	973
102	20	2554.615	INSTALL IMPACT ATTENUATOR	EACH		1		1
103		2554.603	INSTALL PLATE BEAM GUARDRAIL	LF		8		8
104	0	2563.601	TRAFFIC CONTROL	LS	0.259	0.618	0.123	1
105		2564.502	INSTALL SIGN PANEL TYPE C	EACH		3		3
106	12	2573.502	STORM DRAIN INLET PROTECTION	EACH	7	30		37
107		2573.533	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LF		170		170
108	11	2573.533	SEDIMENT CONTROL LOG TYPE ROCK	LF	24	80		104
109		2575.504	RAPID STABILIZATION METHOD 4	SY	125		100.00	225
110		2582.502	4" SOLID LINE MULTI COMP GR IN (WR)	LF		850		850
111		2582.502	4" DBLE SOLID LINE MULTI COMP GR IN (WR)	LF	60	50		110
112		2582.503	CROSSWALK PERF THERMO GR IN	SF	120	105		225

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: Howard Smith, P.E.

HOWARD SMITH P.E.
TYPE NAME

DATE: 4-19-2022

LIC. NO: 46875

CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 240
DULUTH, MN 55802

MICHIGAN ST GAS AND WATER MAIN

CITY PROJECT NO.: 1328

STATE AID PROJECT NO.: NA

DRAWN BY: JRL

SEQ

SHEET NO. 2 OF 87

9:32 AM

2/7/2020

i:\pwu\engineer\projects\1000-1499\1328_michigan_st_gas_main\dwgs\1328-seq notes.dwg