

November 10, 2020

ADDENDUM 1 – JOB 29

TO: All prospective bidders on Project NHU-5-094(114)907, Job No. 29 scheduled for the November 13, 2020 bid opening.

The following plans and request for proposal revision shall be made:

Plan Revisions:

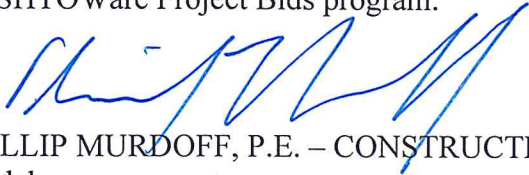
See attached summaries from Paul M. Benning, P.E. dated November 9, 2020 for an explanation.

Request for Proposal Revisions:

Remove and replace pages 5 thru 15 of 17 of the Proposal pages located at the beginning of the Request for Proposal with pages revised 11/9/2020.

Bid Item Changes are summarized in the Plan Addendum Summary and Approval.

This addendum is to be incorporated into the bidder's proposal for this project. AASHTOWare Project Bids files should be updated by downloading the addendum file from the Bid Express on-line bidding exchange at <http://www.bidx.com/> and load it into the AASHTOWare Project Bids program.



PHILLIP MURDOFF, P.E. – CONSTRUCTION SERVICES ENGINEER

80: dch

Enclosure

PLAN ADDENDUM SUMMARY AND APPROVAL

Project Information		
Project:	NHU-5-094(114)907	PCN: 21175
Location:	East Business Loop from 10th Ave E to Exit 64	
Date:	November 06,2020	Lead Designer: Civil Science
Bid Opening Date: November 13, 2020	JOB#: 29	Addendum#: 1
Section	Sheet	Description of Change
8	2	Pay Item 709 0100 GEOSYNTHETIC MATERIAL TYPE G quantity was increased by 237 SY from an original value of 62184 SY to a corrected value of 62421 SY Pay Item 714 4099 PIPE CONDUIT 18IN-APPROACH quantity was reduced by 560 LF from an original value of 1455 LF to a corrected value of 895 LF Pay Item 714 4106 PIPE CONDUIT 24IN-APPROACH quantity was increased by 560 LF from and original value of 680 LF to a corrected value of 1240 LF
51	1	Geosynthetic Material and Applicable Backfill Columns were erroneously left blank. Table was updated to list correct quantity of Geosynthetic Material and appropriate Applicable Backfill detail
51	2	Geosynthetic Material and Applicable Backfill Columns were erroneously left blank. Table was updated to list correct quantity of Geosynthetic Material and appropriate Applicable Backfill detail
51	3	Geosynthetic Material and Applicable Backfill Columns were erroneously left blank. Table was updated to list correct quantity of Geosynthetic Material and appropriate Applicable Backfill detail

APPROVAL

Should the revisions described above be processed as a plan addendum?

 X Yes No



Paul Benning, P.E. – Local Government Engineer

11/9/2020

Date

BID ITEMS

Projects: NHU-5-094(114)907 (PCN-21175) and IM-5-094(147)063 (PCN-22839)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	201	0330	CLEARING & GRUBBING	L SUM	1.				
003	202	0128	REMOVE AGGREGATE BASE	TON	3,948.				
004	202	0130	REMOVAL OF CURB & GUTTER	LF	1,364.				
005	202	0135	REMOVAL OF BITUMINOUS SURFACING	TON	2,144.				
006	202	0136	REMOVAL OF PAVEMENT	TON	40,914.				
007	202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	1.				
008	202	0170	REMOVAL OF CULVERTS-ALL TYPES & SIZES	LF	2,275.				
009	202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	204.				
010	202	0210	REMOVAL OF MANHOLES	EA	2.				
011	202	0230	REMOVAL OF INLETS	EA	2.				
012	203	0101	COMMON EXCAVATION-TYPE A	CY	26,544.				
013	203	0109	TOPSOIL	CY	18,235.				
014	203	0113	COMMON EXCAVATION-WASTE	CY	16,228.				
015	203	0119	TOPSOIL-IMPORTED	CY	170.				
016	203	0138	COMMON EXCAVATION-SUBCUT	CY	195.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
017	203	0140	BORROW-EXCAVATION	CY	57,119.				
018	216	0100	WATER	M GAL	2,668.				
019	251	0200	SEEDING CLASS II	ACRE	24.300				
020	251	2000	TEMPORARY COVER CROP	ACRE	6.300				
021	253	0201	HYDRAULIC MULCH	ACRE	48.700				
022	255	0101	ECB TYPE 1	SY	1,928.				
023	256	0100	RIPRAP GRADE I	CY	26.				
024	260	0100	SILT FENCE UNSUPPORTED	LF	5,738.				
025	260	0101	REMOVE SILT FENCE UNSUPPORTED	LF	5,738.				
026	261	0112	FIBER ROLLS 12IN	LF	11,279.				
027	261	0113	REMOVE FIBER ROLLS 12IN	LF	4,041.				
028	261	0120	FIBER ROLLS 20IN	LF	91.				
029	261	0121	REMOVE FIBER ROLLS 20IN	LF	54.				
030	302	0100	SALVAGED BASE COURSE	TON	84,771.				
031	302	0120	AGGREGATE BASE COURSE CL 5	TON	6,742.				
032	401	0050	TACK COAT	GAL	6,833.100				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
033	401	0060	PRIME COAT	GAL	1,644.				
034	411	0116	MILLING PAVEMENT SURFACE - 3 INCH	SY	9,983.				
035	430	0045	SUPERPAVE FAA 45	TON	24,720.				
036	430	1000	CORED SAMPLE	EA	232.				
037	430	5803	PG 58S-28 ASPHALT CEMENT	TON	544.300				
038	430	5818	PG 58H-34 ASPHALT CEMENT	TON	925.500				
039	550	0305	9IN NON-REINF CONCRETE PVMT CL AE-DOWELED	SY	7,599.				
040	602	1135	BRIDGE APPROACH SLAB-REMOVE & REPLACE	SY	171.200				
041	602	1250	PENETRATING WATER REPELLENT TREATMENT	SY	1,388.				
042	702	0100	MOBILIZATION	L SUM	1.				
043	704	0100	FLAGGING	MHR	3,400.				
044	704	1000	TRAFFIC CONTROL SIGNS	UNIT	8,235.				
045	704	1018	LANE CLOSURE-SIGNAL CONTROL/FLAGGING CONTROL	EA	1.				
046	704	1035	ATTENUATION DEVICE-TYPE B-25	EA	3.				
047	704	1039	ATTENUATION DEVICE-TYPE B-45	EA	4.				
048	704	1052	TYPE III BARRICADE	EA	159.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
049	704	1060	DELINEATOR DRUMS	EA	1,060.				
050	704	1067	TUBULAR MARKERS	EA	308.				
051	704	1087	SEQUENCING ARROW PANEL-TYPE C	EA	2.				
052	704	1500	OBLITERATION OF PAVEMENT MARKING	SF	2,078.				
053	704	3510	PRECAST CONCRETE MED BARRIER-STATE FURNISHED	EA	108.				
054	704	4011	PORTABLE CHANGEABLE MESSAGE SIGN	EA	3.				
055	706	0400	FIELD OFFICE	EA	1.				
056	706	0500	AGGREGATE LABORATORY	EA	1.				
057	706	0550	BITUMINOUS LABORATORY	EA	1.				
058	706	0600	CONTRACTOR'S LABORATORY	EA	1.				
059	708	1531	INLET PROTECTION-FIBER ROLL 12IN	EA	31.				
060	708	1533	REMOVAL INLET PROTECTION-FIBER ROLL 12IN	EA	16.				
061	708	1540	INLET PROTECTION-SPECIAL	EA	52.				
062	708	1541	REMOVE INLET PROTECTION-SPECIAL	EA	52.				
063	709	0100	GEOSYNTHETIC MATERIAL TYPE G	SY	63,181.				
064	709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	80.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
065	710	0409	TEMPORARY CONNECTION	EA	27.				
066	714	0620	PIPE CONC REINF 24IN CL III-STORM DRAIN	LF	38.				
067	714	0820	PIPE CONC REINF 30IN CL III	LF	59.				
068	714	1010	PIPE CONC REINF 42IN CL III-STORM DRAIN	LF	16.				
069	714	2111	PIPE CONC REINF ARCH 29IN X 18IN CL III-S DRAIN	LF	425.				
070	714	3020	END SECT-CONC REINF 24IN	EA	1.				
071	714	3030	END SECT-CONC REINF 30IN	EA	1.				
072	714	3040	END SECT-CONC REINF 42IN	EA	1.				
073	714	3085	END SECT-CONC REINF ARCH 29IN X 18IN	EA	1.				
074	714	4090	PIPE CONDUIT 12IN	LF	91.				
075	714	4095	PIPE CONDUIT 15IN	LF	1,257.				
076	714	4099	PIPE CONDUIT 18IN-APPROACH	LF	895.				
077	714	4100	PIPE CONDUIT 18IN	LF	828.				
078	714	4105	PIPE CONDUIT 24IN	LF	910.				
079	714	4106	PIPE CONDUIT 24IN-APPROACH	LF	1,240.				
080	714	4110	PIPE CONDUIT 30IN	LF	34.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
081	714	5010	PIPE CORR STEEL .064IN 15IN	LF	8.				
082	714	5290	PIPE CORR STEEL .109IN 24IN	LF	5.				
083	714	5805	END SECT CORR STEEL .064IN 15IN	EA	1.				
084	714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	1.				
085	714	9680	PLUG PIPE-ALL TYPES & SIZES	EA	1.				
086	720	0110	RIGHT OF WAY MARKERS	EA	4.				
087	720	0125	ALIGNMENT MONUMENTS	EA	7.				
088	720	0130	IRON PIN R/W MONUMENTS	EA	4.				
089	720	0135	IRON PIN REFERENCE MONUMENTS	EA	3.				
090	722	0107	MANHOLE 54IN	EA	1.				
091	722	0115	MANHOLE 66IN	EA	1.				
092	722	0315	MANHOLE CASTING	EA	3.				
093	722	1106	MANHOLE RISER 54IN	LF	4.				
094	722	1115	MANHOLE RISER 66IN	LF	9.				
095	722	3510	INLET-TYPE 2	EA	38.				
096	722	3520	INLET-TYPE 2 DOUBLE	EA	15.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
097	722	3730	INLET SPECIAL CATCH BASIN 9IN BEEHIVE 48IN	EA	8.				
098	722	3790	INLET SPECIAL CATCH BASIN 9IN BEEHIVE 60IN	EA	4.				
099	722	6200	ADJUST MANHOLE	EA	17.				
100	722	6240	ADJUST UTILITY APPURTENANCE	EA	32.				
101	724	0420	HYDRANT-RELOCATE	EA	2.				
102	744	0100	POLYSTYRENE INSULATION BOARD	BD FT	39,040.				
103	748	0140	CURB & GUTTER-TYPE I	LF	17,502.				
104	748	0141	CURB & GUTTER-TYPE 1 SPECIAL	LF	60.				
105	748	1000	VALLEY GUTTER 36IN	LF	308.				
106	750	0115	SIDEWALK CONCRETE 4IN	SY	7,457.				
107	750	0200	CONCRETE MEDIAN PAVING	SY	255.				
108	750	0210	CONCRETE MEDIAN NOSE PAVING	SY	8.				
109	750	1021	DRIVEWAY CONCRETE 8IN REINFORCED	SY	3,246.				
110	750	2115	DETECTABLE WARNING PANELS	SF	267.				
111	752	0850	ORNAMENTAL FENCE	LF	9,199.				
112	752	0911	TEMPORARY SAFETY FENCE	LF	300.				

PROPOSAL FORM

North Dakota Department of Transportation

BID OPENING: November 13, 2020**Job 029**

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Rev: 11/9/2020

BID ITEMS**Projects: NHU-5-094(114)907 (PCN-21175) and IM-5-094(147)063 (PCN-22839)****Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
113	754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	457.				
114	754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	197.				
115	754	0168	DELINEATORS-TYPE D	EA	3.				
116	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	1,510.				
117	754	0210	GALV STEEL POST-STANDARD PIPE	LF	92.400				
118	754	0214	GALV STEEL POSTS-W-SHAPE POSTS(TWO OR MORE)	LF	60.				
119	754	0534	PANEL FOR SIGNS-TYPE IV REFLECTIVE SHEETING	SF	63.				
120	754	0563	REFERENCE MARKER-TYPE C	EA	1.				
121	754	0592	RESET SIGN PANEL	EA	39.				
122	754	0593	RESET SIGN SUPPORT	EA	27.				
123	754	0805	OBJECT MARKERS - CULVERTS	EA	106.				
124	754	1100	CLASS AE CONCRETE-SIGN FOUNDATIONS	CY	1.900				
125	762	0112	EPOXY PVMT MK MESSAGE	SF	64.				
126	762	0113	EPOXY PVMT MK 4IN LINE	LF	10,570.				
127	762	0115	EPOXY PVMT MK 8IN LINE	LF	406.				
128	762	0117	EPOXY PVMT MK 24IN LINE	LF	178.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
129	762	0122	PREFORMED PATTERNED PVT MK-MESSAGE(GROOVED)	SF	1,710.				
130	762	0420	SHORT TERM 4IN LINE-TYPE R	LF	550.				
131	762	0426	SHORT TERM 24IN LINE-TYPE R	LF	24.				
132	762	1305	PREFORMED PATTERNED PVT MK 4IN LINE-GROOVED	LF	41,429.				
133	762	1307	PREFORMED PATTERNED PVT MK 6IN LINE-GROOVED	LF	613.				
134	762	1309	PREFORMED PATTERNED PVT MK 8IN LINE-GROOVED	LF	4,750.				
135	762	1315	PREFORMED PATTERNED PVT MK 12IN LINE-GROOVED	LF	76.				
136	762	1325	PREFORMED PATTERNED PVT MK 24IN LINE-GROOVED	LF	603.				
137	764	0131	W-BEAM GUARDRAIL	LF	308.				
138	764	0145	W-BEAM GUARDRAIL END TERMINAL	EA	4.				
139	764	0151	REMOVE W-BEAM GUARDRAIL & POSTS	LF	258.				
140	764	2081	REMOVE END TREATMENT & TRANSITION	EA	4.				
141	770	0001	LIGHTING SYSTEM	EA	1.				
142	770	0030	CONCRETE FOUNDATION-HIGH MAST LIGHTING	EA	10.				
143	770	0060	CONCRETE FOUNDATION-FEED POINT-TYPE B	EA	2.				
144	770	0220	CABLE TRENCH-TYPE II	LF	9,566.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
145	770	0330	2IN DIAMETER RIGID CONDUIT	LF	77.				
146	770	0350	3IN DIAMETER RIGID CONDUIT	LF	180.				
147	770	0370	4IN DIAMETER RIGID CONDUIT	LF	285.				
148	770	0483	MULTIPLE UNDERGROUND CABLE 4NO2 STYLE USE	LF	3,310.				
149	770	0485	MULTIPLE UNDERGROUND CABLE 4NO4 STYLE USE	LF	4,338.				
150	770	0486	MULTIPLE UNDERGROUND CABLE 4NO6 STYLE USE	LF	2,453.				
151	770	0735	FEED POINT-TYPE II-PAD MOUNTED	EA	2.				
152	770	3733	HIGH MAST LIGHTING ASSEMBLY TYPE HM-140-4	EA	6.				
153	770	3755	HIGH MAST LIGHTING ASSEMBLY TYPE HM-160-6	EA	1.				
154	770	3757	HIGH MAST LIGHTING ASSEMBLY TYPE HM-160-8	EA	3.				
155	770	4280	LED LUMINAIRE - HIGH MAST	EA	54.				
156	770	4525	REVISE LIGHTING SYSTEM	EA	1.				
157	770	4560	REMOVE LIGHT STANDARD	EA	10.				
158	770	4567	REMOVE LIGHTING SYSTEM	EA	1.				
159	772	0001	TRAFFIC SIGNALS SYSTEM	EA	1.				
160	772	2810	TEMPORARY TRAFFIC SIGNALS	EA	4.				

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						\$\$\$\$\$	000	\$\$\$\$\$	00
161	772	9300	SURVEILLANCE CAMERA SYSTEM	EA	1.				
162	900	0100	SETTLEMENT PLATE	EA	2.				
163	970	1025	REPLANT TREES	EA	7.				
164	990	0220	GUARD POST-PERMANENT	EA	56.				
			TOTAL SUM BID						

Estimated Quantities					Revised	11/6/2020	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
							ND	NHU-5-094(114)907	8	2
SPEC	CODE	ITEM DESCRIPTION	UNIT	Mainline: Funding A	100% City: Funding B	100% County: Funding C	City/County: Funding D	TOTAL		
708	1541	REMOVE INLET PROTECTION-SPECIAL	EA	52				52		
709	0100	GEOSYNTHETIC MATERIAL TYPE G	SY	62421				62421		
709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	80				80		
710	0409	TEMPORARY CONNECTION	EA	27				27		
714	0620	PIPE CONC REINF 24IN CL III-STORM DRAIN	LF	38				38		
714	1010	PIPE CONC REINF 42IN CL III-STORM DRAIN	LF	16				16		
714	2111	PIPE CONC REINF ARCH 29IN X 18IN CL III-S DRAIN	LF	425				425		
714	3020	END SECT-CONC REINF 24IN	EA	1				1		
714	3040	END SECT-CONC REINF 42IN	EA	1				1		
714	3085	END SECT-CONC REINF ARCH 29IN X 18IN	EA	1				1		
714	4090	PIPE CONDUIT 12IN	LF	91				91		
714	4095	PIPE CONDUIT 15IN	LF	1257				1257		
714	4099	PIPE CONDUIT 18IN-APPROACH	LF	895				895		
714	4100	PIPE CONDUIT 18IN	LF	828				828		
714	4105	PIPE CONDUIT 24IN	LF	910				910		
714	4106	PIPE CONDUIT 24IN-APPROACH	LF	1240				1240		
714	4110	PIPE CONDUIT 30IN	LF	34				34		
714	5010	PIPE CORR STEEL .064IN 15IN	LF	8				8		
714	5290	PIPE CORR STEEL .109IN 24IN	LF	5				5		
714	5805	END SECT CORR STEEL .064IN 15IN	EA	1				1		
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	1				1		
714	9680	PLUG PIPE-ALL TYPES & SIZES	EA	1				1		
720	0110	RIGHT OF WAY MARKERS	EA	4				4		
720	0125	ALIGNMENT MONUMENTS	EA	7				7		
720	0130	IRON PIN R/W MONUMENTS	EA	4				4		
720	0135	IRON PIN REFERENCE MONUMENTS	EA	3				3		
722	0107	MANHOLE 54IN	EA	1				1		
722	0115	MANHOLE 66IN	EA	1				1		
722	0315	MANHOLE CASTING	EA	3				3		
722	1106	MANHOLE RISER 54IN	LF	4				4		
722	1115	MANHOLE RISER 66IN	LF	9				9		
722	3510	INLET-TYPE 2	EA	38				38		
722	3520	INLET-TYPE 2 DOUBLE	EA	15				15		
722	3730	INLET SPECIAL CATCH BASIN 9IN BEEHIVE 48IN	EA	8				8		
722	3790	INLET SPECIAL CATCH BASIN 9IN BEEHIVE 60IN	EA	4				4		
722	6200	ADJUST MANHOLE	EA	17				17		
722	6240	ADJUST UTILITY APPURTENANCE	EA	32				32		
724	0420	HYDRANT-RELOCATE	EA	2				2		
744	0100	POLYSTYRENE INSULATION BOARD	BD FT	39040				39040		
748	0140	CURB & GUTTER-TYPE I	LF	17502				17502		
748	1000	VALLEY GUTTER 36IN	LF	308				308		
750	0115	SIDEWALK CONCRETE 4IN	SY	7457				7457		
750	0200	CONCRETE MEDIAN PAVING	SY	255				255		
750	0210	CONCRETE MEDIAN NOSE PAVING	SY	8				8		
750	1021	DRIVEWAY CONCRETE 8IN REINFORCED	SY	3246				3246		
750	2115	DETECTABLE WARNING PANELS	SF	267				267		
752	0850	ORNAMENTAL FENCE	LF	9199				9199		

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)			Allowable Material	Required Diameter In	Steel Pipe Coatings Type	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness In	Geosynthetic Material - Type G (Pay Item) SY	(*) End Sections		Applicable Backfill
				In	Bid Item	LF							Begin	End	
													EA	EA	
10+76 (10th Ave)	18' Rt	11+85 (10th Ave)	23' Rt	15	Pipe Conduit 15IN	110'	Reinforced Concrete Pipe - Class III (barrel length = 110 LF)	15							D-714-27
28+35 (25th Ave)	27' Lt	28+69 (25th Ave)	27' Lt	18	Pipe Conduit 18IN-Approach	34'	Reinforced Concrete Pipe - Class III (barrel length = 34 LF)	18					FES	FES	
							Corrugated Steel Pipe	18	Z, A, P		0.064				
							Spiral Rib Steel Pipe	18	Z, A, P		0.064				
28+53 (25th Ave)	32' Rt	28+93 (25th Ave)	33' Rt	18	Pipe Conduit 18IN-Approach	40'	Reinforced Concrete Pipe - Class III (barrel length = 40 LF)	18					FES	FES	
							Corrugated Steel Pipe	18	Z, A, P		0.064				
							Spiral Rib Steel Pipe	18	Z, A, P		0.064				
83+72 (Villard)	21' Lt	85+02 (Villard)	27' Lt	18	Pipe Conduit 18IN-Approach	142'	Reinforced Concrete Pipe - Class III (barrel length = 142 LF)	18					FES	FES	
							Corrugated Steel Pipe	18	Z, A, P		0.064				
							Spiral Rib Steel Pipe	18	Z, A, P		0.064				
370+94	87' Rt	372+02	70' Rt	18	Pipe Conduit 18IN	112'	Reinforced Concrete Pipe - Class III (barrel length = 112 LF)	18					FES		D-714-27
371+08	76' Lt	371+13	76' Lt	24	Pipe Corr Steel .109IN 24IN	5'	Corrugated Steel Pipe	24							
371+62	76' Lt	371+75	76' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	14'	Reinbrced Concrete Arch Pipe 29IN x 18IN - Class III	29X18				11			D-714-26
371+75	76' Lt	371+96	77' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	22'	Reinbrced Concrete Arch Pipe 29IN x 18IN - Class III	29X18							
371+96	77' Lt	372+07	77' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	11'	Reinbrced Concrete Arch Pipe 29IN x 18IN - Class III	29X18						FES	
372+02	70' Rt	373+00	28.5' Rt	15	Pipe Conduit 15IN	108'	Reinforced Concrete Pipe - Class III (barrel length = 108 LF)	15							
372+70	62' Lt	372+70	35.5' Lt	15	Pipe Conduit 15IN	27'	Reinforced Concrete Pipe - Class III (barrel length = 27 LF)	15							
373+56	72' Lt	374+12	72' Lt	3	Pipe Conduit 24IN	56'	Reinforced Concrete Pipe - Class III (barrel length = 56 LF)	3					FES	FES	
373+00	28.5' Rt	374+01	28.5' Rt	15	Pipe Conduit 15IN	102'	Reinforced Concrete Pipe - Class III (barrel length = 102 LF)	15							D-714-27
375+94	63' Lt	376+55	52.5' Lt	24	Pipe Conduit 24IN	62'	Reinforced Concrete Pipe - Class III (barrel length = 62 LF)	24					FES		
376+55	28.5' Rt	376+55	28.5' Lt	18	Pipe Conduit 18IN	58'	Reinforced Concrete Pipe - Class III (barrel length = 58 LF)	18				39			D-714-26
376+55	28.5' Lt	376+55	52.5' Lt	18	Pipe Conduit 18IN	28'	Reinforced Concrete Pipe - Class III (barrel length = 28 LF)	18							
376+55	52.5' Lt	379+70	53.5' Lt	24	Pipe Conduit 24IN	310'	Reinforced Concrete Pipe - Class III (barrel length = 310 LF)	24							
379+70	28.5' Rt	379+70	28.5' Lt	18	Pipe Conduit 18IN	58'	Reinforced Concrete Pipe - Class III (barrel length = 58 LF)	18				39			D-714-26
379+70	28.5' Lt	379+70	53.5' Lt	18	Pipe Conduit 18IN	26'	Reinforced Concrete Pipe - Class III (barrel length = 26 LF)	18							
379+70	53.5' Lt	381+17	53.5' Lt	24	Pipe Conduit 24IN	146'	Reinforced Concrete Pipe - Class III (barrel length = 146 LF)	24							
381+17	53.5' Lt	382+38	62' Lt	24	Pipe Conduit 24IN	122'	Reinforced Concrete Pipe - Class III (barrel length = 122 LF)	24							
382+38	62' Lt	382+40	28.5' Lt	24	Pipe Conduit 24IN	34'	Reinforced Concrete Pipe - Class III (barrel length = 34 LF)	24							
382+40	28.5' Lt	382+70	28.5' Rt	24	Pipe Conduit 24IN	66'	Reinforced Concrete Pipe - Class III (barrel length = 66 LF)	24				48			D-714-26
382+70	28.5' Rt	385+43	28.5' Rt	18	Pipe Conduit 18IN	276'	Reinforced Concrete Pipe - Class III (barrel length = 276 LF)	18							D-714-27
384+47	66' Lt	385+10	64' Lt	18	Pipe Conduit 18IN-Approach	62'	Reinforced Concrete Pipe - Class III (barrel length = 62 LF)	18					FES	FES	
385+43	28.5' Rt	385+44	28.5' Lt	18	Pipe Conduit 18IN	58'	Reinforced Concrete Pipe - Class III (barrel length = 58 LF)	18				39			D-714-26
385+43	28.5' Rt	385+79	58' Rt	15	Pipe Conduit 15IN	48'	Reinforced Concrete Pipe - Class III (barrel length = 48 LF)	15						FES	
385+43	28.5' Rt	387+53	28.5' Rt	18	Pipe Conduit 18IN	212'	Reinforced Concrete Pipe - Class III (barrel length = 212 LF)	18							D-714-27
387+53	28.5' Rt	387+58	41' Rt	15	Pipe Conduit 15IN	14'	Reinforced Concrete Pipe - Class III (barrel length = 14 LF)	15						FES	
389+40	62' Lt	389+97	61.6' Lt	18	Pipe Conduit 18IN-Approach	57'	Reinforced Concrete Pipe - Class III (barrel length = 57 LF)	18					FES	FES	D-714-27
389+97	61.6' Lt	390+15	62' Lt	18	Pipe Conduit 18IN-Approach	18'	Reinforced Concrete Pipe - Class III (barrel length = 18 LF)	18							
389+97	61.6' Lt	390+02	51.2' Lt	15	Pipe Conduit 15IN	12'	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	15							
398+14	30' Rt	398+35.7	48.1' Rt	15	Pipe Conduit 15IN	28'	Reinforced Concrete Pipe - Class III (barrel length = 28 LF)	15							
398+09	47' Rt	398+35.7	48.1' Rt	18	Pipe Conduit 18IN-Approach	27'	Reinforced Concrete Pipe - Class III (barrel length = 27 LF)	18					FES		
							Corrugated Steel Pipe	18	Z, A, P		0.064				
							Spiral Rib Steel Pipe	18	Z, A, P		0.064				
398+35.7	48.1' Rt	399+71	50' Rt	18	Pipe Conduit 18IN-Approach	135'	Reinforced Concrete Pipe - Class III (barrel length = 135 LF)	18						FES	D-714-27
							Corrugated Steel Pipe	18	Z, A, P		0.064				
							Spiral Rib Steel Pipe	18	Z, A, P		0.064				

Corrugations: 2 = 2-2/3"x1/2"
3 = 3"x1"
5 = 5"x1"

Coatings: Z = Zinc
A = Aluminum
P = Polymeric (over Zinc or Aluminum)

Spiral Ribs: 3/4 = 3/4"x3/4"@7-1/2"
1 = 3/4"x1"@11-1/2"

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Pipe List

E Business LP 10th Ave E - Exit 64

Dickinson, ND

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)		Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	Geosynthetic Material - Type G (Pay Item)	(*) End Sections		Applicable Backfill
				In	Bid Item							Begin	End	
					LF		In	Type		In	SY	EA	EA	
398+73	28.5' Lt	399+14	55' Lt	15	Pipe Conduit 15IN	50'	15							
399+14	55' Lt	399+46	53' Lt	30	Pipe Conduit 30IN	34'	30							D-714-27
399+42	80.5' Lt	399+46	52.5' Lt	15	Pipe Conduit 15IN	28'	15							D-714-27
404+05	28.5' Rt	404+05	73.5' Rt	15	Pipe Conduit 15IN	45'	15						FES	
404+52	28.5' Lt	404+53	55' Lt	15	Pipe Conduit 15IN	28'	15						FES	
407+68	28.5' Rt	407+68	55' Rt	15	Pipe Conduit 15IN	28'	15						FES	
408+51	55' Lt	409+41	62' Lt	18	Pipe Conduit 18IN-Approach	90'	18						FES	
							18	Z, A, P		0.064				
							18	Z, A, P		0.064				
409+84	28.5' Lt	409+84	58' Lt	15	Pipe Conduit 15IN	30'	15						FES	
410+24	42' Lt	410+24	57' Lt	42	Pipe Conc Reinf 42IN CL III-Storm Drain	16'	42						FES	
410+40	28.5' Rt	410+40	46' Rt	15	Pipe Conduit 15IN	18'	15						FES	
410+44	28.5' Lt	410+44	55' Lt	15	Pipe Conduit 15IN	28'	15						FES	
411+15	28.5' Lt	411+15	52' Lt	15	Pipe Conduit 15IN	24'	15						FES	
411+31	28.5' Rt	411+42	47' Rt	15	Pipe Conduit 15IN	22'	15						FES	
411+75	28.5' Rt	411+75	45' Rt	15	Pipe Conduit 15IN	18'	15						FES	
412+00	28.5' Lt	412+00	52' Lt	15	Pipe Conduit 15IN	24'	15						FES	
412+77	46' Rt	413+79	52' Rt	24	Pipe Conduit 24IN-Approach	102'	24					FES	FES	D-714-27
413+64	63.5' Lt	414+17	65' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	54'	29X18					FES	FES	
413+64	59' Lt	414+17	60.5' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	54'	29X18					FES	FES	
413+60	66' Lt	413+68	69' Lt	15	Pipe Corr Steel .064IN 15IN	8'	15	Z, A, P		0.064		FES		
413+93	28.5' Rt	413+93	42' Rt	15	Pipe Conduit 15IN	14'	15						FES	
414+31	28.5' Lt	414+31	56' Lt	15	Pipe Conduit 15IN	28'	15						FES	
415+54	62.25' Lt	416+02	62.25' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	49'	29X18					FES	FES	
415+54	57.75' Lt	416+02	57.75' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	49'	29X18					FES	FES	
416+15	28.5' Lt	416+15	54' Lt	15	Pipe Conduit 15IN	26'	15						FES	
416+20	28.5' Rt	416+20	41' Rt	15	Pipe Conduit 15IN	14'	15						FES	
418+24	62.25' Lt	418+62	62.25' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	38'	29X18					FES	FES	
418+24	57.75' Lt	418+62	57.75' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	38'	29X18					FES	FES	
418+58	54' Rt	419+78	53' Rt	24	Pipe Conduit 24IN-Approach	120'	24					FES	FES	D-714-27
418+74	28.5' Lt	418+74	54' Lt	15	Pipe Conduit 15IN	26'	15						FES	
419+88	28.5' Rt	419+88	43' Rt	15	Pipe Conduit 15IN	14'	15						FES	
419+89	61' Lt	420+39	58' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	50'	29X18					FES	FES	
421+10	53' Rt	421+79	53' Rt	24	Pipe Conduit 24IN-Approach	70'	24					FES	FES	
421+40	57' Lt	421+85	58' Lt	-	Pipe Conc Reinf Arch 29IN X 18IN CL III-S Drain	46'	29X18					FES	FES	
421+87	28.5' Rt	421+87	43' Rt	15	Pipe Conduit 15IN	16'	15						FES	
423+01	28.5' Lt	423+01	52' Lt	15	Pipe Conduit 15IN	24'	15						FES	
424+12	59' Lt	424+58	58' Lt	18	Pipe Conduit 18IN-Approach	46'	18					FES	FES	
							18	Z, A, P		0.064				
							18	Z, A, P		0.064				
426+95	59' Rt	428+73	44' Rt	24	Pipe Conduit 24IN-Approach	180'	24					FES		D-714-27
							24	Z, A, P		0.064				
							24	Z, A, P		0.064				
428+73	44.5' Rt	428+73	28.5' Rt	24	Pipe Conduit 24IN	16'	24							
428+73	28.5' Rt	428+88	53.5' Lt	24	Pipe Conduit 24IN	84'	24				61			D-714-26

Corrugations: 2 = 2-2/3"x1/2"
3 = 3"x1"
5 = 5"x1"

Coatings: Z = Zinc
A = Aluminum
P = Polymeric (over Zinc or Aluminum)

Spiral Ribs: 3/4 = 3/4"x3/4"@7-1/2"
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Pipe List

E Business LP 10th Ave E - Exit 64

Dickinson, ND

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)			Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	Geosynthetic Material - Type G (Pay Item)	(*) End Sections		Applicable Backfill		
				In	LF	SY							EA	EA			
					Bid Item			In	Type		In						
428+88	53.5' Lt	429+00	59' Lt	24	Pipe Conduit 24IN	14'	Reinforced Concrete Pipe - Class III (barrel length = 14 LF)	24									
434+25	28.5' Rt	434+25	42.5' Rt	15	Pipe Conduit 15IN	14'	Reinforced Concrete Pipe - Class III (barrel length = 14 LF)	15									
434+25	43' Rt	435+49	52' Rt	18	Pipe Conduit 18IN-Approach	124'	Reinforced Concrete Pipe - Class III (barrel length = 124 LF)	18									
							Corrugated Steel Pipe	18	Z, A, P	0.064			FES		D-714-27		
							Spiral Rib Steel Pipe	18	Z, A, P	0.064							
434+63	57' Lt	435+19	57' Lt	18	Pipe Conduit 18IN-Approach	57'	Reinforced Concrete Pipe - Class III (barrel length = 57 LF)	18					FES	FES			
437+65	28.5' Lt	438+38	53' Lt	15	Pipe Conduit 15IN	77'	Reinforced Concrete Pipe - Class III (barrel length = 77 LF)	15							FES		
438+05	28.5' Rt	438+05	40' Rt	15	Pipe Conduit 15IN	12'	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	15							FES		
438+45	77' Rt	439+09	78' Rt	18	Pipe Conduit 18IN-Approach	63'	Reinforced Concrete Pipe - Class III (barrel length = 63 LF)	18							FES	FES	D-714-27
							Corrugated Steel Pipe	18	Z, A, P	0.064							
							Spiral Rib Steel Pipe	18	Z, A, P	0.064							
438+48	62' Lt	439+05	63' Lt	24	Pipe Conduit 24IN-Approach	55'	Reinforced Concrete Pipe - Class III (barrel length = 55 LF)	24						FES	FES		
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
440+18	38' Lt	440+18	68' Lt	24	Pipe Conc Reinf 24IN CL III-Storm Drain	31'	Reinforced Concrete Pipe - Class III (barrel length = 31 LF)	24									
440+18	54' Rt	440+18	61' Rt	24	Pipe Conc Reinf 24IN CL III-Storm Drain	7'	Reinforced Concrete Pipe - Class III (barrel length = 7 LF)	24							FES		
442+27	28.5' Lt	442+50	53' Rt	15	Pipe Conduit 15IN	32'	Reinforced Concrete Pipe - Class III (barrel length = 32 LF)	15							FES		
442+63	63' Lt	444+17	58' Rt	24	Pipe Conduit 24IN-Approach	153'	Reinforced Concrete Pipe - Class III (barrel length = 153 LF)	24							FES	FES	
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
442+70	28.5' Rt	442+70	40' Rt	15	Pipe Conduit 15IN	12'	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	15							FES		
445+60	28.5' Rt	445+60	49' Rt	15	Pipe Conduit 15IN	22'	Reinforced Concrete Pipe - Class III (barrel length = 22 LF)	15							FES		
445+93	56' Lt	446+97	68' Lt	24	Pipe Conduit 24IN-Approach	105'	Reinforced Concrete Pipe - Class III (barrel length = 105 LF)	24							FES	FES	
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
446+12	28.5' Lt	446+94	62' Lt	15	Pipe Conduit 15IN	90'	Reinforced Concrete Pipe - Class III (barrel length = 90 LF)	15							FES		
447+39	66' Lt	448+06	64.2' Lt	24	Pipe Conduit 24IN-Approach	68'	Reinforced Concrete Pipe - Class III (barrel length = 68 LF)	24							FES		
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
448+06	64.2' Lt	449+22	60' Lt	24	Pipe Conduit 24IN-Approach	116'	Reinforced Concrete Pipe - Class III (barrel length = 116 LF)	24								FES	D-714-27
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
449+00	32.5' Rt	449+00	54' Rt	15	Pipe Conduit 15IN	22'	Reinforced Concrete Pipe - Class III (barrel length = 22 LF)	15							FES		
450+50	32.5' Rt	450+50	55' Rt	15	Pipe Conduit 15IN	22'	Reinforced Concrete Pipe - Class III (barrel length = 22 LF)	15							FES		
450+70	58' Lt	451+15	63.5' Lt	24	Pipe Conduit 24IN-Approach	45'	Reinforced Concrete Pipe - Class III (barrel length = 45 LF)	24							FES		
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
450+74	70' Rt	451+97	78' Rt	24	Pipe Conduit 24IN-Approach	123'	Reinforced Concrete Pipe - Class III (barrel length = 123 LF)	24							FES	FES	D-714-27
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
451+15	63.5' Lt	451+88	73.2' Lt	24	Pipe Conduit 24IN-Approach	74'	Reinforced Concrete Pipe - Class III (barrel length = 74 LF)	24									D-714-27
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							
451+88	73.2' Lt	452+17	77' Lt	24	Pipe Conduit 24IN-Approach	29'	Reinforced Concrete Pipe - Class III (barrel length = 29 LF)	24								FES	
							Corrugated Steel Pipe	24	Z, A, P	0.064							
							Spiral Rib Steel Pipe	24	Z, A, P	0.064							

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