

ENGINEER'S REPORT

The undersigned is the engineer for the City of West Fargo, Cass County, North Dakota, and submits the following report to the Board of City Commissioners of said city:

The purpose of the improvements is to provide new City infrastructure to service the Westview 3rd Addition development as petitioned by the developer. The improvements will service the new lots platted and will promote residential development in the proposed project area.

Sewer, Water, Storm and Street Imp. Dist. No. 1315 will involve the construction of improvements consisting of sanitary sewer, water main, storm sewer, curb and gutter, asphalt pavement, street lights, signing, striping and other miscellaneous installations.

Based upon the estimate of the probable cost, attached hereto and made a part thereof, and the engineering information and studies, the work proposed in said district is feasible.

Dated this 5th day of February, 2018.

Dustin Scott
Moore Engineering, Inc.
West Fargo ND



Engineer for the City of West Fargo, ND

**SEWER, WATER, STORM AND STREET IMPROVEMENT DIST. NO. 1315
WESTVIEW 3RD ADDITION
WEST FARGO ND**

Engineer's Opinion of Probable Cost

ITEM	UNIT	ESTIMATED		TOTAL	
		QUANTITY	UNIT PRICE		
<u>Sanitary Sewer Items</u>					
1.	Sanitary Sewer - Connect To Existing	Each	2	\$1,000.00	\$2,000.00
2.	Sanitary Sewer - 8" PVC SDR 35	LF	480	\$35.00	\$16,800.00
3.	Sanitary Sewer Manhole - 48"	Each	4	\$4,500.00	\$18,000.00
4.	External Manhole Chimney Seal	Each	4	\$250.00	\$1,000.00
5.	Sanitary Sewer Service Connection - 6" PVC SDR 26	Each	18	\$500.00	\$9,000.00
6.	Sanitary Sewer Service - 6" PVC SDR 26	LF	1,085	\$16.00	\$17,360.00
7.	Televising - Sanitary Sewer Main	LF	480	\$1.00	\$480.00
8.	Televising - Sanitary Sewer Service	Each	18	\$100.00	\$1,800.00
<u>Water Main Items</u>					
1.	Water Main - Connect To Existing	Each	2	\$500.00	\$1,000.00
2.	Water Main - 8" PVC C900	LF	500	\$25.00	\$12,500.00
3.	Specials	Lbs	250	\$3.50	\$875.00
4.	Gate Valve & Box - 6"	Each	1	\$1,200.00	\$1,200.00
5.	Gate Valve & Box - 8"	Each	3	\$1,500.00	\$4,500.00
6.	Hydrant - 10.5'	Each	1	\$4,300.00	\$4,300.00
7.	Hydrant Lead - 6" PVC C900	LF	5	\$25.00	\$125.00
8.	Corporation - 1"	Each	18	\$250.00	\$4,500.00
9.	Curb Stop & Box - 1"	Each	18	\$450.00	\$8,100.00
10.	Water Service Line - 1"	LF	840	\$24.00	\$20,160.00
<u>Storm Sewer Items</u>					
1.	Storm Sewer - 4" Perforated PVC - Connect To Existing	Each	4	\$20.00	\$80.00
2.	Storm Sewer - 4" Perforated PVC	LF	1,070	\$3.00	\$3,210.00
3.	Storm Sewer - 12" PP	LF	135	\$25.00	\$3,375.00
4.	Storm Sewer - 12" RCP	LF	40	\$27.00	\$1,080.00
5.	Storm Sewer - 15" PP	LF	160	\$35.00	\$5,600.00
6.	Storm Sewer - 15" RCP	LF	50	\$37.00	\$1,850.00
7.	Storm Sewer Manhole - 48"	Each	1	\$2,500.00	\$2,500.00
8.	Storm Sewer Manhole - 72"	Each	1	\$4,250.00	\$4,250.00
9.	Storm Sewer Manhole - Adjust Existing Special	Each	2	\$1,000.00	\$2,000.00
10.	Storm Sewer Catch Basin - 2' x 3'	Each	1	\$1,800.00	\$1,800.00
11.	Storm Sewer Catch Basin - 30"	Each	2	\$1,500.00	\$3,000.00
12.	External Manhole Chimney Seal	Each	5	\$250.00	\$1,250.00
13.	Temporary Pumping	LSum	1	\$1,500.00	\$1,500.00
<u>Roadway Items</u>					
1.	Excavation - Unclassified	CY	1,500	\$5.00	\$7,500.00
2.	Excavation - Unclassified - Export	CY	1,025	\$7.00	\$7,175.00
3.	Embankment	CY	475	\$2.00	\$950.00
4.	Subgrade Preparation	SY	1,820	\$1.50	\$2,730.00
5.	Reinforcement Fabric	SY	1,820	\$1.60	\$2,912.00
6.	Gravel - 9" NDDOT Class 5	CY	455	\$32.00	\$14,560.00
7.	Curb & Gutter - Saw Full Depth	LF	10	\$5.00	\$50.00
8.	Curb & Gutter - Connect To Existing	Each	4	\$50.00	\$200.00
9.	Curb & Gutter - Mountable Inflow	LF	1,070	\$17.00	\$18,190.00
10.	Asphalt Pavement - Saw Full Depth	LF	25	\$5.00	\$125.00
11.	Asphalt Base Course - 3.5"	SY	1,425	\$18.00	\$25,650.00
12.	Tack Coat	Gal	75	\$3.50	\$262.50
13.	Asphalt Wear Course - 2"	SY	1,425	\$16.00	\$22,800.00
14.	Concrete Pavement - Saw Full Depth	LF	25	\$5.00	\$125.00
15.	Sign & Sign Post - Remove	Each	4	\$100.00	\$400.00
16.	Sign Anchor - In Ground	Each	1	\$40.00	\$40.00
17.	Sign Anchor - Band	Each	1	\$50.00	\$50.00

18.	Sign Post	LF	20	\$10.00	\$200.00
19.	Signing - Standard	SF	10	\$15.00	\$150.00
20.	Striping - 24" White Grooved Plastic	LF	75	\$10.00	\$750.00
21.	Cluster Box Unit - 8 Unit	Each	2	\$1,400.00	\$2,800.00

General Items

1.	Cleaning	LSum	1	\$1,000.00	\$1,000.00
2.	Storm Water Management	LSum	1	\$1,000.00	\$1,000.00
3.	Traffic Control	LSum	1	\$750.00	\$750.00
4.	Mowing	Acre	0.8	\$450.00	\$337.50
5.	Watering	Each	6	\$100.00	\$600.00
6.	Excavation - 6" Topsoil Stripping	CY	700	\$1.50	\$1,050.00
7.	Topsoil Replacement - 4"	CY	300	\$5.00	\$1,500.00
8.	Inlet Protection Device	Each	14	\$100.00	\$1,400.00
9.	Sedimentation Control Wattle - 9"	LF	150	\$3.00	\$450.00
10.	Stabilized Construction Entrance	Each	1	\$1,300.00	\$1,300.00
11.	Seeding - Type II	Acre	0.8	\$475.00	\$356.25
12.	Mulch - Type B - Hydromulch	Acre	0.8	\$1,500.00	\$1,125.00
13.	Mulch - Type A - Temporary Straw	Acre	6.0	\$300.00	\$1,800.00

Electrical Items

1.	Conductor - #6 USE/Cu.	LF	3,200	\$1.15	\$3,680.00
2.	Tracer Wire - #12	LF	1,070	\$0.50	\$535.00
3.	Innerduct - 1.5" PVC	LF	1,070	\$4.30	\$4,601.00
4.	Concrete Base - 5'	Each	3	\$420.00	\$1,260.00
5.	Light Standard - Single LED and 14' Post	Each	3	\$2,400.00	\$7,200.00
6.	Spare Light Standard - Single LED and 14' Post	Each	1	\$2,100.00	\$2,100.00

Construction Subtotal	\$294,859.25
Contingencies	\$29,940.75

Total Construction **\$324,800.00**

Engineering	\$35,728.00
Legal & Administration	\$32,480.00
Bond Discount	\$12,992.00

TOTAL PROJECT **\$406,000.00**