INDIANOLA MUNICIPAL UTILITIES

IMU

Electric • Communications • Water

IMU BOARD OF TRUSTEES OF THE ELECTRIC, WATER AND COMMUNICATIONS UTILITIES

February 14, 2022
5:30 PM
City Hall Council Chambers
Agenda

1. **Call to Order**
2. **Roll Call**
3. **Public Comment**
4. **Consent Agenda:**
   A. Approval of Claims from January 31, 2022.
   B. Approval of Claims for February 15, 2022.
   C. Approval of December 2021 Financials.
   D. Approval of Minutes of the prior Board meeting.
5. **Electric Utility Informational Items**
6. **Water Utility Informational Items**
   A. Water Main Mapping
7. **Communications Utility Action Items**
   A. Fiber Extension Project
      1. Public Hearing on the plans, specifications, form of contract and estimate of cost for the Fiber Extension to the Water Resource Recovery Facility Project.
      2. Resolution adopting the plans, specifications, form of contract and estimate of cost for the Fiber Extension to the Water Resource Recovery Facility Project.
      3. Resolution awarding a construction contract for the Fiber Extension to the Water Resource Recovery Facility Project.
8. **Communications Utility Informational Items**
9. **Combined Electric, Water and Communications Action Items**
   A. Selection of 2022 Officers
10. **Combined Electric, Water and Communications Informational Items**
    A. Operation and Maintenance draft budget presentation and discussion.

11. Other Business

12. Adjourn

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Approval of Claims from January 31, 2022.

Recommendation: Simple motion is in order.

Attachments: 1. 013122 Elation Claims List

AP Check Preview

Date Range: All Dates

Indianola Municipal Utilities

Friday, January 28, 2022
12:14:32 PM

Vendor / Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
Account To Be Paid From	**0000-10120-999**								
ACCO UNLIMITED CORP. - VEND-2810									
1/1/2022	ACCO Liquid chlorinating	Open Terms	1,302.80	0.00	0.00	1,302.80	1,302.80	0218208-IN	BL-7484
						1,302.80	**1,302.80**		
AUTOMATIC SYSTEMS CO. - VEND-51495									
1/7/2022	Well 9 field service	Open Terms	657.50	0.00	0.00	657.50	657.50	36996	BL-7483
						657.50	**657.50**		
Avesis Third Party Administrators Inc - VEND-1108									
1/31/2022	0122 Vision	Net 30	377.10	0.00	15.00	377.10	377.10	2810970	BL-7511
						377.10	**377.10**		
Bankers Trust Company - VEND-1003									
1/30/2023	4th Qtr Investment Management Fees	Net 30	1,826.21	0.00	15.00	1,826.21	1,826.21	220111-458123	BL-7540
						1,826.21	**1,826.21**		
Big Ten Network - VEND-1096									
1/30/2022	1221 BTN	Net 30	1,782.50	0.00	15.00	1,782.50	1,782.50	109542	BL-7567
						1,782.50	**1,782.50**		
Border States Industries Inc - VEND-1070									
2/9/2022	2" PVC Couplings - PVC Glue	Net 30	219.11	0.00	15.00	219.11	219.11	923508114	BL-7500
						219.11	**219.11**		
Calix Inc - VEND-1028									
2/6/2022	ONT - 711GE	Net 30	2,326.59	0.00	15.00	2,326.59	2,326.59	282451	BL-7548
						2,326.59	**2,326.59**		
Cappel's Ace Hardware - VEND-1204									
2/12/2022	Wire and fastners	Net 30	74.88	0.00	15.00	74.88	74.88	002029	BL-7543
2/23/2022	Spray paint	Net 30	5.59	0.00	15.00	5.59	5.59	002076	BL-7553
2/4/2022	Paint and brush	Net 30	20.97	0.00	15.00	20.97	20.97	001995	BL-7493
						101.44	**101.44**		
Cedar Falls Utilities - VEND-1045 - BL-7552									
2/4/2022	Labor and rack space	Net 30	6,780.00	0.00	15.00	6,780.00	6,780.00	Labor and rack space	BL-7552
						6,780.00	**6,780.00**		

Vendor / Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
Cedar Falls Utilities - VEND-1045 - BL-7580									
2/23/2022	2021 Support & Q2 & Q3 amino engage acs fe	Net 30	31,716.49	0.00	15.00	31,716.49	31,716.49	92005	BL-7580
						31,716.49	**31,716.49**		
Cintas Corporation - VEND-1007									
2/24/2022	First aid supplies	Net 30	57.53	0.00	15.00	57.53	57.53	5092869858	BL-7579
2/10/2022	First aid supplies	Net 30	33.25	0.00	15.00	33.25	33.25	5091954390	BL-7541
1/30/2022	First aid supplies	Net 30	32.93	0.00	15.00	32.93	32.93	8405482875	BL-7505
						123.71	**123.71**		
City Of Indianola - VEND-1008 - BL-7512									
2/13/2022	4th Qtr 21 Franchise Fees	Net 30	14,887.83	0.00	15.00	14,887.83	14,887.83	4th Qtr 21 Franchise Fees	BL-7512
						14,887.83	**14,887.83**		
Controlled Access - VEND-1284									
2/16/2022	Power gate repair	Net 30	809.65	0.00	15.00	809.65	809.65	19244	BL-7535
						809.65	**809.65**		
Denman & Company, LLP - VEND-1193									
1/29/2022	Professional services - FY21 Audit	Net 30	4,800.00	0.00	15.00	4,800.00	4,800.00	5921-D143119	BL-7487
						4,800.00	**4,800.00**		
DICKINSON LAW - VEND-101709									
1/11/2022	Legal services	Open Terms	383.50	0.00	0.00	383.50	383.50	1135663	BL-7498
						383.50	**383.50**		
Doug Pagel - VEND-1283									
2/11/2022	0122 Mobile Device	Net 30	56.25	0.00	15.00	56.25	56.25	0122 Mobile Device	BL-7515
						56.25	**56.25**		
Dust Pros Janitorial - VEND-1011									
2/18/2022	Cleaning supplies - WA	Net 30	111.25	0.00	15.00	111.25	111.25	2491	BL-7538
2/16/2022	0122 Scrub and buff - WA	Net 30	180.00	0.00	15.00	180.00	180.00	2479	BL-7545
2/16/2022	0122 Cleaning - Util Svcs	Net 30	749.00	0.00	15.00	749.00	749.00	2486	BL-7547
2/16/2022	0122 Cleaning - Fiber	Net 30	856.00	0.00	15.00	856.00	856.00	2485	BL-7551
1/18/2022	Cleaning supplies - Fiber	Net 30	29.96	0.00	15.00	29.96	29.96	2473	BL-7562
2/16/2022	0122 Cleaning - EL	Net 30	984.40	0.00	15.00	984.40	984.40	2483	BL-7571
2/16/2022	Cleaning supplies - EL	Net 30	29.96	0.00	15.00	29.96	29.96	2484	BL-7572

Vendor / Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
						2,940.57	**2,940.57**		
GRAYMONT WESTERN LIME INC - VEND-101387									
1/7/2022	High calcium quicklime	Open Terms	4,927.06	0.00	0.00	4,927.06	4,927.06	167805	BL-7546
						4,927.06	**4,927.06**		
Gregg Young Buick GMC - VEND-1227									
2/24/2022	Service on 2016 Chevy Silverado	Net 30	386.79	0.00	15.00	386.79	386.79	22542	BL-7582
						386.79	**386.79**		
HALLETT MATERIALS - VEND-20817									
12/30/2021	Washed fill sand	Open Terms	156.47	0.00	0.00	156.47	156.47	1691777	BL-7537
						156.47	**156.47**		
Hearst Television Inc - VEND-1131									
1/30/2022	1221 KCCI	Net 30	5,674.40	0.00	15.00	5,674.40	5,674.40	424136	BL-7566
						5,674.40	**5,674.40**		
Independent Advocate - VEND-1136									
2/8/2022	Digital advertising	Net 30	200.00	0.00	15.00	200.00	200.00	992	BL-7561
						200.00	**200.00**		
Interstate Power Systems Inc - VEND-1033									
2/10/2022	Service call for generator	Net 30	1,598.12	0.00	15.00	1,598.12	1,598.12	R012080401:01	BL-7565
						1,598.12	**1,598.12**		
Iowa Association Of Municipal Utilities - VEND-1014									
9/24/2021	Municipal boardband conference	Net 30	130.00	0.00	15.00	130.00	130.00	200008881	BL-7550
2/12/2022	Underground workshop - Morrison	Net 30	420.00	0.00	15.00	420.00	420.00	200008907	BL-7488
						550.00	**550.00**		
Iowa Dept Of Revenue - VEND-1117									
2/11/2022	4th Quarter 2021 Use Tax	Net 30	567.02	0.00	15.00	567.02	567.02	4th Quarter 2021 Use Tax	BL-7489
1/31/2022	Sales Tax Billed 1-1-22	Net 30	40,584.10	0.00	15.00	40,584.10	40,584.10	Sales Tax Billed 1-1-22	BL-7499
						41,151.12	**41,151.12**		
Jerico Services, Inc. - VEND-1093									
2/23/2022	Triple melt	Net 30	802.50	0.00	15.00	802.50	802.50	0083911-IN	BL-7584

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
						802.50	**802.50**		
LINDE INC - VEND-6415									
1/8/2022	Carbon Dioxide	Open Terms	2,231.81	0.00	0.00	2,231.81	2,231.81	68219326	BL-7492
						2,231.81	**2,231.81**		
Marquee Sports Network - VEND-1165									
1/30/2022	1221 Expanded Basic	Net 30	2,646.90	0.00	15.00	2,646.90	2,646.90	1221 Expanded Basic	BL-7569
						2,646.90	**2,646.90**		
McCoy Hardware Inc - VEND-1035									
2/21/2022	Zinc nozzle	Net 30	33.72	0.00	15.00	33.72	33.72	A531105	BL-7560
						33.72	**33.72**		
MCMASTER-CARR SUPPLY CO - VEND-34108									
1/13/2022	Steel strapping	Open Terms	68.26	0.00	0.00	68.26	68.26	71107198	BL-7531
						68.26	**68.26**		
Mid American Energy Co - VEND-1018									
2/13/2022	Electric - muni plt substation	Net 30	10.00	0.00	15.00	10.00	10.00	521462053	BL-7534
2/19/2022	Gas - 909 E Hillcrest	Net 30	14.57	0.00	15.00	14.57	14.57	521679888	BL-7574
2/19/2022	Gas - 110 S B	Net 30	845.03	0.00	15.00	845.03	845.03	521680698	BL-7575
2/21/2022	Gas - 210 W 2nd	Net 30	138.49	0.00	15.00	138.49	138.49	521684810	BL-7577
2/19/2022	Gas - 1300 E Iowa Bldg A	Net 30	819.54	0.00	15.00	819.54	819.54	521677575	BL-7578
						1,827.63	**1,827.63**		
Midwest Alarm Services - VEND-1116									
2/7/2022	Building B Fire alarm monitoring	Net 30	458.38	0.00	15.00	458.38	458.38	370425	BL-7524
2/7/2022	Building A fire alarm system inspection and au	Net 30	585.89	0.00	15.00	585.89	585.89	370424	BL-7525
12/8/2021	Building B fire alarm system inspection and au	Net 30	508.33	0.00	15.00	508.33	508.33	364886	BL-7526
						1,552.60	**1,552.60**		
MSC - VEND-1250									
2/6/2022	Disposable gloves	Net 30	36.11	0.00	15.00	36.11	36.11	96247654	BL-7527
2/9/2022	Solvent Cans and Lube Cans	Net 30	132.48	0.00	15.00	132.48	132.48	96247644	BL-7528
						168.59	**168.59**		
MUNICIPAL ENERGY AGENCY OF NEBRASKA - VEND-35805									
1/30/2022	Purchased power - Dec 21	Net 30	700,700.76	0.00	15.00	700,700.76	700,700.76	302623	BL-7490

Vendor / Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
						700,700.76	**700,700.76**		
Mutual Of Omaha - VEND-1107									
1/31/2022	0122 Premiums	Net 30	4,709.78	0.00	15.00	4,709.78	4,709.78	1294070629	BL-7510
						4,709.78	**4,709.78**		
NAPA AUTO PARTS - VEND-35949									
1/15/2022	Light	Open Terms	24.98	0.00	0.00	24.98	24.98	015716	BL-7542
1/20/2022	Starter switch	Open Terms	22.99	0.00	0.00	22.99	22.99	016036	BL-7558
1/21/2022	Oil	Open Terms	29.99	0.00	0.00	29.99	29.99	016119	BL-7559
						77.96	**77.96**		
National Cable Television Cooperative, Inc. - VEND-1095									
2/17/2022	1221 Cable	Net 30	46,456.61	0.00	15.00	46,456.61	46,456.61	21120805	BL-7536
						46,456.61	**46,456.61**		
Nexstar Broadcasting, Inc - VEND-1092									
1/30/2022	1221 WHO	Net 30	6,644.16	0.00	15.00	6,644.16	6,644.16	425380	BL-7570
1/30/2022	1221 NewsNation	Net 30	325.50	0.00	15.00	325.50	325.50	1221 NewsNation	BL-7568
						6,969.66	**6,969.66**		
O'REILLY AUTO PARTS - VEND-40157									
1/16/2022	Battery	Open Terms	144.71	0.00	0.00	144.71	144.71	0337-275071	BL-7544
						144.71	**144.71**		
Power & Tel - VEND-1037									
2/3/2022	Remote, conn, and schotchlock	Net 30	3,803.37	0.00	15.00	3,803.37	3,803.37	7392257-00	BL-7523
						3,803.37	**3,803.37**		
SKARSHAUG TESTING LABORATORY INC - VEND-50410									
1/5/2022	Annual PPE testing	Open Terms	866.88	0.00	0.00	866.88	866.88	256774	BL-7507
1/5/2022	Replacement high voltage blankets	Open Terms	343.51	0.00	0.00	343.51	343.51	256775	BL-7508
1/25/2022	Annual testing PPE	Open Terms	1,374.32	0.00	0.00	1,374.32	1,374.32	257205	BL-7583
						2,584.71	**2,584.71**		
STATE HYGIENIC LABORATORY - VEND-23245									
1/1/2022	Testing	Open Terms	256.50	0.00	0.00	256.50	256.50	223302	BL-7494
						256.50	**256.50**		
SUMMIT DRILLING LLC - VEND-103054									

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
1/18/2022	Scott felton project	Open Terms	1,520.00	0.00	0.00	1,520.00	1,520.00	1808	BL-7529
						1,520.00	**1,520.00**		
Teklink - VEND-1262									
1/28/2022	Conduit bury and bore	Net 30	1,831.00	0.00	15.00	1,831.00	1,831.00	WE 1/01/22	BL-7585
						1,831.00	**1,831.00**		
Terry-Durin Co - VEND-1038									
2/2/2022	TRACER WIRE	Net 30	3,065.34	0.00	15.00	3,065.34	3,065.34	97916-01	BL-7522
2/12/2022	Pullling Tape and Pulling Lube	Net 30	142.31	0.00	15.00	142.31	142.31	99105-00	BL-7509
2/2/2022	Pulling Tape	Net 30	211.86	0.00	15.00	211.86	211.86	98862-00	BL-7506
						3,419.51	**3,419.51**		
TIM HILDRETH COMPANY - VEND-21751									
1/18/2022	Boiler repairs	Open Terms	1,868.94	0.00	0.00	1,868.94	1,868.94	27533	BL-7573
						1,868.94	**1,868.94**		
TRUCK EQUIPMENT INC - VEND-53754									
1/22/2022	Repair plow truck	Open Terms	570.11	0.00	0.00	570.11	570.11	84484	BL-7557
						570.11	**570.11**		
U.S. Cellular - VEND-1104									
2/11/2022	0122 Cel Phone	Net 30	715.27	0.00	15.00	715.27	715.27	0485156153	BL-7581
						715.27	**715.27**		
ULINE - VEND-1251									
2/3/2022	Gas 4 cylinder cabinet	Net 30	502.02	0.00	15.00	502.02	502.02	143309861	BL-7563
						502.02	**502.02**		
United States Treasury - VEND-1138									
1/30/2022	Q4 2021 Federal Excise Tax	Net 30	1,396.09	0.00	15.00	1,396.09	1,396.09	Q4 2021 Federal Excise Tx	BL-7516
						1,396.09	**1,396.09**		
VEENSTRA & KIMM - VEND-57600									
1/22/2022	Engineer X	Open Terms	249.00	0.00	0.00	249.00	249.00	285108-6	BL-7554
1/22/2022	Engineer X	Open Terms	664.00	0.00	0.00	664.00	664.00	285105-6	BL-7555
1/22/2022	Engineer I-A and Engineer VIII	Open Terms	5,682.00	0.00	0.00	5,682.00	5,682.00	285107-10	BL-7556
						6,595.00	**6,595.00**		
VERIZON WIRELESS - VEND-3535									

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
1/1/2022	1221 Hot Spots	Open Terms	360.09	0.00	0.00	360.09	360.09	9896230439	BL-7496
						360.09	**360.09**		
VISION METERING LLC - VEND-103244									
1/1/2022	4S Electric Meters	Open Terms	682.20	0.00	0.00	682.20	682.20	204336	BL-7513
						682.20	**682.20**		
Warren County 911 - VEND-1132									
1/30/2022	4th Qtr 2021 E911 Fees	Net 30	2,193.00	0.00	15.00	2,193.00	2,193.00	4th Qtr 2021 E911 Fees	BL-7491
						2,193.00	**2,193.00**		
Warren County Engineer - VEND-1102									
2/9/2022	1221 Fuel Distribution	Net 30	2,481.87	0.00	15.00	2,481.87	2,481.87	1221 Fuel Distribution	BL-7514
						2,481.87	**2,481.87**		
Waste Management - VEND-1086									
1/30/2022	4 Yard dumpster	Net 30	64.59	0.00	15.00	64.59	64.59	6881191-0516-3	BL-7564
1/30/2022	2 Yard dumpster	Net 30	94.99	0.00	15.00	94.99	94.99	6881189-0516-7	BL-7539
						159.58	**159.58**		
WESCO - VEND-60220									
1/15/2022	Scotchkote	Open Terms	89.11	0.00	0.00	89.11	89.11	018510	BL-7532
1/14/2022	Photo Controls	Open Terms	255.73	0.00	0.00	255.73	255.73	017732	BL-7533
1/14/2022	Hwy 92 East Poles and Breakaway Bases	Open Terms	7,200.03	0.00	0.00	7,200.03	7,200.03	016967	BL-7530
1/13/2022	#6 Bare Copper Wire	Open Terms	375.00	0.00	0.00	375.00	375.00	016266	BL-7501
1/12/2022	Truck light	Open Terms	207.43	0.00	0.00	207.43	207.43	014047	BL-7502
1/11/2022	WR Connectors	Open Terms	102.72	0.00	0.00	102.72	102.72	011656	BL-7503
1/11/2022	1/0 Primary Wire	Open Terms	9,017.05	0.00	0.00	9,017.05	9,017.05	011653	BL-7504
						17,247.07	**17,247.07**		
Whitfield @ Eddy Law - VEND-1272									
2/26/2022	Legal services	Net 30	1,560.00	0.00	15.00	1,560.00	1,560.00	289133	BL-7586
						1,560.00	**1,560.00**		
Wiegert Disposal Inc - VEND-1081									
3/2/2022	0122 Dumpster Service	Net 30	110.00	0.00	15.00	110.00	110.00	0122 Dumpster Service	BL-7576
						110.00	**110.00**		

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
YMCA Of Greater Des Moines - VEND-1169									
2/2/2022	0122 Employee Wellness	Net 30	184.00	0.00	15.00	184.00	184.00	0122 Employee Wellness	BL-7495
						184.00	**184.00**		
		Check Count: **60**			Totals:	**$944,167.03**	**$944,167.03**		

INDIANOLA MUNICIPAL UTILITIES

Electric • Communications • Water

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Approval of Claims for February 15, 2022.

Recommendation: Simple motion is in order.

Attachments: 1. 021522 Elation Claims List

AP Check Preview

Date Range: All Dates

Indianola Municipal Utilities

Friday, February 11, 2022
2:52:58 PM

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
Account To Be Paid From	**0000-10120-999**								
ALTEC INDUSTRIES INC. - VEND-3755									
1/27/2022	Warning labels - Unit 29	Open Terms	17.19	0.00	0.00	17.19	17.19	11830893	BL-7721
						17.19	**17.19**		
Avesis Third Party Administrators Inc - VEND-1108									
3/3/2022	0222 Vision	Net 30	359.08	0.00	15.00	359.08	359.08	2819267	BL-7611
						359.08	**359.08**		
Big Ten Network - VEND-1096									
3/2/2022	0122 BTN	Net 30	1,821.25	0.00	15.00	1,821.25	1,821.25	119301	BL-7670
						1,821.25	**1,821.25**		
Border States Industries Inc - VEND-1070									
2/17/2022	#12 THHN Wire Red and Green	Net 30	282.23	0.00	15.00	282.23	282.23	923553853	BL-7692
2/20/2022	#12 THHN Red Wire	Net 30	94.08	0.00	15.00	94.08	94.08	923577478	BL-7693
3/6/2022	2" PVC Couplings Long	Net 30	39.52	0.00	15.00	39.52	39.52	923656394	BL-7702
3/3/2022	80 Amp Fuses	Net 30	35.15	0.00	15.00	35.15	35.15	923633371	BL-7703
3/6/2022	MB-3 Bracket	Net 30	61.10	0.00	15.00	61.10	61.10	923656395	BL-7704
2/20/2022	Transformer Secondary Connectors	Net 30	100.41	0.00	15.00	100.41	100.41	923577479	BL-7705
2/23/2022	3/4" Spring Washers	Net 30	202.77	0.00	15.00	202.77	202.77	923584964	BL-7706
3/11/2022	Heat Shrink	Net 30	113.31	0.00	15.00	113.31	113.31	923680354	BL-7708
						928.57	**928.57**		
Brick Gentry P.C. - VEND-1004									
2/24/2022	Legal services	Net 30	405.00	0.00	15.00	405.00	405.00	368012	BL-7653
						405.00	**405.00**		
Calix Inc - VEND-1028									
2/26/2022	GPON	Net 30	4,517.42	0.00	15.00	4,517.42	4,517.42	283939	BL-7643
						4,517.42	**4,517.42**		
Cappel's Ace Hardware - VEND-1204									
3/2/2022	Tube shrink and misc fastners	Net 30	9.35	0.00	15.00	9.35	9.35	002124	BL-7647
3/5/2022	Muriatic acid and batteries	Net 30	27.97	0.00	15.00	27.97	27.97	002140	BL-7656
						37.32	**37.32**		
Cedar Falls Utilities - VEND-1045 - BL-7640									
3/3/2022	Labor and rack space	Net 30	5,422.90	0.00	15.00	5,422.90	5,422.90	92019	BL-7640

Vendor / Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
						5,422.90	**5,422.90**		
Cintas Corporation - VEND-1007									
2/27/2022	First aid supplies	Net 30	224.19	0.00	15.00	224.19	224.19	8405521926	BL-7712
						224.19	**224.19**		
City Of Indianola - VEND-1008 - BL-7594									
1/30/2022	1221 Caselle Claims	Net 30	4,045.87	0.00	15.00	4,045.87	4,045.87	1221 Caselle Claims	BL-7594
						4,045.87	**4,045.87**		
City Of Indianola - VEND-1008 - BL-7675									
3/5/2022	0222 Professional services	Net 30	86,490.68	0.00	15.00	86,490.68	86,490.68	2823	BL-7675
						86,490.68	**86,490.68**		
Consortia Consulting - VEND-1009									
2/16/2022	Consulting	Net 30	975.00	0.00	15.00	975.00	975.00	23280	BL-7725
						975.00	**975.00**		
Crystal Clear Communications LLC - VEND-1205									
3/3/2022	Monthly newsletter	Net 30	2,500.00	0.00	15.00	2,500.00	2,500.00	CCC-0275	BL-7659
						2,500.00	**2,500.00**		
Des Moines Register Media - VEND-1010									
1/30/2022	BOT minutes	Net 30	439.66	0.00	15.00	439.66	439.66	0004328269	BL-7661
						439.66	**439.66**		
DES MOINES WATER WORKS - VEND-10870									
1/29/2022	Leak detection service	Open Terms	796.43	0.00	0.00	796.43	796.43	20148580	BL-7655
						796.43	**796.43**		
DES PLANQUES, CHRIS - VEND-101766									
2/2/2022	0222 Mobile Device	Open Terms	75.00	0.00	0.00	75.00	75.00	0222 Mobile Device	BL-7607
						75.00	**75.00**		
Doug Pagel - VEND-1283									
3/3/2022	0222 Mobile Device	Net 30	75.00	0.00	15.00	75.00	75.00	0222 Mobile Device	BL-7608
						75.00	**75.00**		

Vendor / Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
Doug Shull - VEND-1105									
3/3/2022	0222 Treasury Contract	Net 30	83.34	0.00	15.00	83.34	83.34	0222 Treasury Contract	BL-7597
						83.34	**83.34**		
Dylan Michelsen - VEND-1180									
3/3/2022	0222 Mobile Device	Net 30	75.00	0.00	15.00	75.00	75.00	0222 Mobile Device	BL-7603
						75.00	**75.00**		
Elisha Brown - VEND-1209									
3/3/2022	0222 Mobile Device	Net 30	25.00	0.00	15.00	25.00	25.00	0222 Mobile Device	BL-7606
						25.00	**25.00**		
Estate of Sharon Kay Kemmis - VEND-1141 - BL-7592									
2/4/2022	Credit Refund	Net 30	129.95	0.00	0.00	129.95	129.95	00057373-9	BL-7592
						129.95	**129.95**		
Fuse Technic LLC - VEND-1012									
3/3/2022	Consulting	Net 30	1,050.00	0.00	15.00	1,050.00	1,050.00	FT20220201003	BL-7636
						1,050.00	**1,050.00**		
HACH COMPANY - VEND-20810									
1/16/2022	SC4500 w/o plug claros	Open Terms	2,657.24	0.00	0.00	2,657.24	2,657.24	12834811	BL-7645
						2,657.24	**2,657.24**		
Hearst Television Inc - VEND-1131									
3/2/2022	KCCI	Net 30	5,629.50	0.00	15.00	5,629.50	5,629.50	428623	BL-7668
						5,629.50	**5,629.50**		
IEUSTA - VEND-23614									
2/9/2022	2022 Dues	Open Terms	150.00	0.00	0.00	150.00	150.00	2022 Dues	BL-7690
						150.00	**150.00**		
ImOn Communications LLC - VEND-1072									
3/2/2022	Regulatory and billing	Net 30	7,095.61	0.00	15.00	7,095.61	7,095.61	INV0033517	BL-7638
						7,095.61	**7,095.61**		
IMU - VEND-8629									

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
2/2/2022	Utilities - Fiber	Open Terms	1,091.79	0.00	0.00	1,091.79	1,091.79	10173535	BL-7639
2/2/2022	Utilities - WA	Open Terms	13,736.06	0.00	0.00	13,736.06	13,736.06	10175640	BL-7646
2/2/2022	Utilities - Util Svcs	Open Terms	192.15	0.00	0.00	192.15	192.15	10174678	BL-7649
2/2/2022	Utilities - EL	Open Terms	2,293.49	0.00	0.00	2,293.49	2,293.49	10179123	BL-7724
						17,313.49	**17,313.49**		
Innovative Systems - VEND-1048									
3/3/2022	Feb elation maint fee and additional utilities so	Net 30	22,435.56	0.00	15.00	22,435.56	22,435.56	INV-01167	BL-7662
3/6/2022	0222 Utility bills, postage and IMU flyer	Net 30	6,090.78	0.00	15.00	6,090.78	6,090.78	INV-01231	BL-7595
						28,526.34	**28,526.34**		
Iowa Association Of Municipal Utilities - VEND-1014									
3/11/2022	Member dues	Net 30	21,055.00	0.00	15.00	21,055.00	21,055.00	25388	BL-7669
						21,055.00	**21,055.00**		
Iowa One Call - VEND-1015									
2/24/2022	Locates	Net 30	387.00	0.00	15.00	387.00	387.00	239195	BL-7644
2/24/2022	Locates	Net 30	206.10	0.00	15.00	206.10	206.10	239194	BL-7631
2/24/2022	Locates	Net 30	370.80	0.00	15.00	370.80	370.80	238148	BL-7720
						963.90	**963.90**		
Iowa Radio Plus - VEND-1223									
1/25/2022	:30 Web ads	Net 30	27.36	0.00	15.00	27.36	27.36	21120539	BL-7665
12/28/2021	:30 Web ads	Net 30	27.36	0.00	15.00	27.36	27.36	21110504	BL-7666
3/1/2022	:30 Web ads	Net 30	34.20	0.00	15.00	34.20	34.20	22010516	BL-7679
						88.92	**88.92**		
IOWA STATE AUDITOR - VEND-90749									
2/10/2022	FY21 Audit Filing Fee	Open Terms	850.00	0.00	0.00	850.00	850.00	FY21 Audit Filing Fee	BL-7609
						850.00	**850.00**		
Kline Electric - VEND-1141 - BL-7593									
2/8/2022	Credit Refund	Net 30	35.00	0.00	0.00	35.00	35.00	00011099-0	BL-7593
						35.00	**35.00**		
KNIA/KRLS - VEND-1090									
3/1/2022	:30 Spot	Net 30	757.80	0.00	15.00	757.80	757.80	22010604	BL-7678
						757.80	**757.80**		
Kurt Gocken - VEND-1023									

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
3/3/2022	0222 Mobile Device	Net 30	75.00	0.00	15.00	75.00	75.00	0222 Mobile Device	BL-7598
						75.00	**75.00**		
Kurt Ripperger - VEND-1025									
3/3/2022	0222 Mobile Device	Net 30	75.00	0.00	15.00	75.00	75.00	0222 Mobile Device	BL-7601
						75.00	**75.00**		
LONGER, CHRIS - VEND-34025									
2/2/2022	0222 Mobile Device	Open Terms	75.00	0.00	0.00	75.00	75.00	0222 Mobile Device	BL-7604
						75.00	**75.00**		
Marquee Sports Network - VEND-1165									
3/2/2022	0122 Expanded Basic	Net 30	2,797.75	0.00	15.00	2,797.75	2,797.75	0122 Expanded Basic	BL-7667
						2,797.75	**2,797.75**		
Maxwell Haddox - VEND-1141 - BL-7591									
2/4/2022	Credit Refund	Net 30	12.74	0.00	0.00	12.74	12.74	00009840-4	BL-7591
						12.74	**12.74**		
METCALF, MIKE - VEND-34230									
2/2/2022	0222 Mobile Device	Open Terms	75.00	0.00	0.00	75.00	75.00	0222 Mobile Device	BL-7605
						75.00	**75.00**		
Mid American Energy Co - VEND-1018									
2/26/2022	2 months gas at 111 S Buxton Muni Plant	Net 30	2,471.02	0.00	15.00	2,471.02	2,471.02	521909147	BL-7691
3/2/2022	Gas - 1300 E Iowa Bldg B	Net 30	194.48	0.00	15.00	194.48	194.48	521995348	BL-7719
						2,665.50	**2,665.50**		
Midwest Alarm Services - VEND-1116									
3/10/2022	Fire alarm monitoring - 111 S Buxton	Net 30	458.38	0.00	15.00	458.38	458.38	372677	BL-7713
2/7/2022	Turbine fire suppression inspection	Net 30	1,575.00	0.00	15.00	1,575.00	1,575.00	370423	BL-7710
						2,033.38	**2,033.38**		
MSC - VEND-1250									
3/12/2022	Orange Wire Nuts	Net 30	67.15	0.00	15.00	67.15	67.15	26851524	BL-7711
2/23/2022	Insulated Gloves XL	Net 30	21.33	0.00	15.00	21.33	21.33	22606484	BL-7694

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
2/20/2022	Winter Gloves Large	Net 30	41.42	0.00	15.00	41.42	41.42	22606474	BL-7695
2/27/2022	Leather Gloves	Net 30	104.05	0.00	15.00	104.05	104.05	25497404	BL-7696
						233.95	**233.95**		
Mutual Of Omaha - VEND-1107									
3/3/2022	0222 Premiums	Net 30	4,861.61	0.00	15.00	4,861.61	4,861.61	1309210896	BL-7610
						4,861.61	**4,861.61**		
Nexstar Broadcasting, Inc - VEND-1092									
3/2/2022	0122 NewsNation	Net 30	325.50	0.00	15.00	325.50	325.50	430050	BL-7671
3/2/2022	0122 WHO	Net 30	6,228.90	0.00	15.00	6,228.90	6,228.90	430049	BL-7672
						6,554.40	**6,554.40**		
Pella Printing Co, Inc - VEND-1062									
3/2/2022	Door hangers	Net 30	178.00	0.00	15.00	178.00	178.00	63005	BL-7663
3/2/2022	Perfed paper	Net 30	176.00	0.00	15.00	176.00	176.00	63006	BL-7664
						354.00	**354.00**		
Power & Tel - VEND-1037									
2/26/2022	FIBER DROP - 750'	Net 30	1,127.81	0.00	15.00	1,127.81	1,127.81	7200098-01	BL-7641
2/19/2022	REMOTE - NOVA IR	Net 30	810.81	0.00	15.00	810.81	810.81	7392257-01	BL-7642
						1,938.62	**1,938.62**		
Quality Pest Control - VEND-1087									
3/6/2022	Pest control	Net 30	76.62	0.00	15.00	76.62	76.62	68156	BL-7654
						76.62	**76.62**		
Secure Shred - VEND-1063									
3/5/2022	Shred service	Net 30	52.00	0.00	15.00	52.00	52.00	66033	BL-7634
						52.00	**52.00**		
SHRED IT USA - VEND-103010									
2/4/2022	Shred service	Open Terms	77.29	0.00	0.00	77.29	77.29	8000950500	BL-7652
						77.29	**77.29**		
Skye McBroom - VEND-1026									
3/3/2022	0222 Mobile Device	Net 30	75.00	0.00	15.00	75.00	75.00	0222 Mobile Device	BL-7602
						75.00	**75.00**		
SNYDER & ASSOCIATES INC - VEND-98579									

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
1/27/2022	Construction services	Open Terms	3,430.00	0.00	0.00	3,430.00	3,430.00	119.1077.01A-5	BL-7651
						3,430.00	**3,430.00**		
STATE HYGIENIC LABORATORY - VEND-23245									
2/1/2022	Testing	Open Terms	202.50	0.00	0.00	202.50	202.50	225206	BL-7657
						202.50	**202.50**		
T & R ELEC SUPPLY CO - VEND-52010									
2/12/2022	Single Phase Padmount Transformers	Open Terms	6,550.00	0.00	0.00	6,550.00	6,550.00	166376	BL-7709
						6,550.00	**6,550.00**		
T.R.M. DISPOSAL LLC - VEND-101016									
1/25/2022	0222 Trash	Open Terms	42.00	0.00	0.00	42.00	42.00	22329	BL-7650
						42.00	**42.00**		
Terry-Durin Co - VEND-1038									
2/23/2022	Replacement vaults	Net 30	1,685.25	0.00	15.00	1,685.25	1,685.25	100205-00	BL-7681
2/18/2022	Order for 20. 3 arrived damaged so only payin	Net 30	9,549.75	0.00	15.00	9,549.75	9,549.75	99256-00	BL-7682
2/24/2022	LED Lights	Net 30	4,359.18	0.00	15.00	4,359.18	4,359.18	97664-00	BL-7718
						15,594.18	**15,594.18**		
Unite Private Networks - VEND-1054									
3/3/2022	Dark Fiber	Net 30	3,368.60	0.00	15.00	3,368.60	3,368.60	SI-22-003782	BL-7637
						3,368.60	**3,368.60**		
UPHDM Occupational Medicine - VEND-1101									
3/2/2022	Employee testing	Net 30	139.75	0.00	15.00	139.75	139.75	111963	BL-7676
3/4/2022	New driver enrollments	Net 30	52.50	0.00	15.00	52.50	52.50	97088	BL-7660
						192.25	**192.25**		
Vanderpool Plumbing & Heating - VEND-1066									
2/26/2022	Gas regulator and repair heaters in shop	Net 30	1,061.66	0.00	15.00	1,061.66	1,061.66	5345	BL-7723
						1,061.66	**1,061.66**		
VERIZON WIRELESS - VEND-3535									
2/1/2022	0122 Hot Spots	Open Terms	360.09	0.00	0.00	360.09	360.09	9898470804	BL-7596
						360.09	**360.09**		
Warren County Engineer - VEND-1102									

Vendor / Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
3/6/2022	0122 Fuel Distribution	Net 30	2,373.61	0.00	15.00	2,373.61	2,373.61	0122 Fuel Distribution	BL-7648
						2,373.61	**2,373.61**		
Waste Management - VEND-1086									
2/27/2022	2 Yard Dumpster	Net 30	95.79	0.00	15.00	95.79	95.79	6887233-0516-7	BL-7658
2/27/2022	4 Yard Dumpster	Net 30	64.59	0.00	15.00	64.59	64.59	6887235-0516-2	BL-7633
						160.38	**160.38**		
WESCO - VEND-60220									
1/29/2022	WR 885 Connectors	Open Terms	86.88	0.00	0.00	86.88	86.88	036115	BL-7714
2/1/2022	FR Jeans	Open Terms	442.45	0.00	0.00	442.45	442.45	038066	BL-7707
2/5/2022	Copper Wire	Open Terms	183.72	0.00	0.00	183.72	183.72	046354	BL-7697
1/19/2022	Red Locate Paint	Open Terms	194.53	0.00	0.00	194.53	194.53	021537	BL-7698
1/13/2022	Lifting sling	Open Terms	225.72	0.00	0.00	225.72	225.72	015302	BL-7699
2/9/2022	Transformer Brackets	Open Terms	136.87	0.00	0.00	136.87	136.87	049954	BL-7700
2/9/2022	Flood Seal Connectors	Open Terms	179.50	0.00	0.00	179.50	179.50	049953	BL-7701
						1,449.67	**1,449.67**		
Wiegert Disposal Inc - VEND-1081									
2/12/2022	Extra Dumpster Service	Net 30	320.00	0.00	15.00	320.00	320.00	Extra Dumpster Service	BL-7689
						320.00	**320.00**		
Williams Machine Shop - VEND-1290									
3/3/2022	Stainless steel manhole hook	Net 30	250.00	0.00	15.00	250.00	250.00	15625	BL-7726
						250.00	**250.00**		
Wisconsin Independent Network, LLC - VEND-1067									
3/3/2022	Ethernet	Net 30	4,173.00	0.00	15.00	4,173.00	4,173.00	WIN014192	BL-7635
						4,173.00	**4,173.00**		
YMCA Of Greater Des Moines - VEND-1169									
3/9/2022	0222 Employee Wellness	Net 30	184.00	0.00	15.00	184.00	184.00	0222 Employee Wellness	BL-7677
						184.00	**184.00**		
Your Clear Next Step - VEND-1289									
2/27/2022	Executive coaching	Net 30	2,700.00	0.00	15.00	2,700.00	2,700.00	3159	BL-7612
						2,700.00	**2,700.00**		

Vendor Due Date	Notes	Terms	Bill Total	Discount	Interest	Amount Due	Payment	Invoice Number	Bill Number
		Check Count: **68**			Totals:	**$260,061.45**	**$260,061.45**		

INDIANOLA MUNICIPAL UTILITIES

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Approval of December 2021 Financials.

Recommendation: Simple motion is in order.

Attachments: 1. 1221 Financials Summary

Water Utility
Fund Summary
December 31, 2021

	FY 2022 Beg Fund Balance	YTD *Revenue	YTD **Expenditures	FY 2022 YTD Fund Balance	*Rev Compared to Budget	**Exp Compared to Budget	Notes
					$ 2,768,300	$ 2,791,712	O&M Budget Revenue & Expenses
					$ 879,800	$ 879,800	Capital Budget Revenue & Expenses
						50.00%	Percent of Budget Comparison for July
600 Water O&M	$ 221,538	$ 1,449,554	$ 1,446,140	$ 224,951	52.36%	51.80%	
700 Water Capital	$ 2,488,638	$ 439,900	$ 287,609	$ 2,640,929	50.00%	32.69%	
790 Water Rev. Bonds	$ -	$ -	$ -	$ -			
780 Water Impr. Reserves	$ 75,000	$ -	$ -	$ 75,000			
Total	$ 2,785,176	$ 1,889,454	$ 1,733,750	$ 2,940,880			

Reserve Targets:

Operational Cash on Hand	29	Days
Overall (110 or better)	312	Days

Other Operating Data

	Gallons Pumped FY21-22	Gallons Pumped FY20-21		Inventory on Hand FY21-22	Inventory on Hand FY20-21
July	45,915,600	43,766,000		$ 70,025	$ 60,294
August	46,698,000	46,527,000		$ 86,918	$ 68,321
September	44,528,000	38,938,000		$ 86,965	$ 75,317
October	41,430,000	37,065,000		$ 81,330	$ 63,699
November	36,116,000	32,846,000		$ 114,388	$ 63,642
December	37,914,000	31,668,000		$ 114,500	$ 65,648
January					$ 63,009
February					$ 55,918
March					$ 87,967
April					$ 89,167
May					$ 84,617
June					$ 70,899
YTD TOTAL	252,601,600	230,810,000	YTD AVG	$ 92,354	$ 70,708
	9.4%			30.6%	

Electric Utility
Fund Summary
December 31, 2021

	FY 2022 Beg Fund Balance	YTD *Revenue	YTD **Expenditures	FY 2022 YTD Fund Balance	*Rev Compared to Budget	**Exp Compared to Budget	Notes
					$ 16,146,772	$ 15,692,183	O&M Budget Revenue & Expenses
					$ 1,071,600	$ 3,348,000	Capital Budget Revenue & Expenses
						50.00%	Percent of Budget Comparison for July
630 Electric O&M	$ 6,473,202	$ 9,033,423	$ 7,567,049	$ 7,939,576	55.95%	48.22%	
730 Electric Capital	$ 4,598,601	$ 667,494	$ 262,139	$ 5,003,956	62.29%	7.83%	
793 Electric Rev. Bonds	$ 1,368,248	$ 566,725	$ 168,250	$ 1,766,723			2017C Interest Payment
625 Revolving Econ Dev	$ 114,097	$ -	$ -	$ 114,097			
626 USDA RLF	$ 375,000	$ -	$ -	$ 375,000			
Total	$ 12,929,148	$ 10,267,641	$ 7,997,438	$ 15,199,352			

Reserve Targets:

Operational Cash on Hand	193	Days
Overall (110 or better)	298	Days

Other Operating Data

	Kwh's Billed FY21-22	Kwh's Billed FY20-21		Inventory on Hand FY21-22	Inventory on Hand FY20-21
July	11,445,992	8,914,241		$ 989,343	$ 994,613
August	12,112,667	13,234,240		$ 992,348	$ 988,447
September	13,038,750	13,646,968		$ 997,025	$ 1,011,061
October	13,556,254	13,400,541		$ 1,020,121	$ 1,003,522
November	9,944,562	10,297,980		$ 1,057,167	$ 1,082,990
December	8,421,475	8,891,505		$ 1,020,372	$ 1,089,326
January					$ 1,087,587
February					$ 1,045,063
March					$ 1,018,846
April					$ 976,098
May					$ 1,028,556
June					$ 992,530
YTD TOTAL	68,519,700	68,385,475	YTD AVG	$ 1,012,729	$ 1,026,553
	0.2%			-1.3%	

Fiber Utility
Fund Summary
December 31, 2021

	FY 2022 Beg Fund Balance	YTD *Revenue	YTD **Expenditures	FY 2022 YTD Fund Balance	*Rev Compared to Budget	**Exp Compared to Budget	Notes
					$ 4,237,100	$ 4,104,889	O&M Budget Revenue & Expenses
					$ 275,000	$ 270,000	Capital Budget Revenue & Expenses
						50.00%	Percent of Budget Comparison for July
640 Fiber O&M	$ 222,680	$ 2,157,107	$ 1,817,888	$ 561,900	50.91%	44.29%	
740 Fiber Capital	$ -	$ 141,824	$ 59,986	$ 81,838	51.57%	22.22%	
Total	$ 222,680	$ 2,298,931	$ 1,877,873	$ 643,738			

Reserve Targets:

Operational Cash on Hand	57	Days
Overall (110 or better)	63	Days

Other Operating Data

	Subscriptions FY21-22	FY20-21	YOY Increase %	Inventory on Hand FY21-22	FY20-21
July	2,995	2,402	25%	$ 1,379,250	$ 1,041,499
August	3,039	2,455	24%	$ 1,381,182	$ 1,050,027
September	3,087	2,519	23%	$ 1,391,655	$ 1,130,772
October	3,136	2,594	21%	$ 1,403,383	$ 1,145,629
November	3,173	2,633	21%	$ 1,395,733	$ 1,162,303
December	3,214	2,685	20%	$ 1,513,915	$ 1,168,993
January					$ 1,184,037
February					$ 1,235,109
March					$ 1,257,544
April					$ 1,300,743
May					$ 1,299,534
June					$ 1,383,366
YTD AVG	3,107	2,548	YTD AVG	$ 1,410,853	$ 1,196,630
	22.0%			17.9%	

IMU Admin
Fund Summary
December 31, 2021

	FY 2022 Beg Fund Balance	YTD *Revenue	YTD **Expenditures	FY 2022 YTD Fund Balance	*Rev Compared to Budget	**Exp Compared to Budget	Notes
					$ 691,200	$ 691,200	O&M Budget Revenue & Expenses-Utility Services
					$ 560,711	$ 560,711	O&M Budget Revenue & Expenses-IMU Admin
						50.00%	Percent of Budget Comparison for July
620 Utility Services		$ 346,988	$ 302,520		50.20%	43.77%	
IMU Admin		$ 280,355	$ 294,996		50.00%	52.61%	
Total	$ 382,873	$ 627,343	$ 597,516	$ 412,700			

INDIANOLA MUNICIPAL UTILITIES
IMU
Electric • Communications • Water

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From: Jackie Raffety, City Clerk/Asst. Finance Director

Date: February 14, 2022

Subject: Approval of Minutes of the prior Board meeting.

Recommendation: Simple motion is in order.

Attachments: 1. 01242022 BOT Minutes

IMU BOARD OF TRUSTEES OF THE ELECTRIC,
WATER AND COMMUNICATIONS UTILITIES

January 24, 2022
5:30 PM
City Hall Council Chambers
Minutes

The Indianola Municipal Utilities Board of Trustees met in regular session at 5:30 p.m. on January 24, 2022 in the City Hall Council Chambers. Chairperson Adam Voigts called the meeting to order and on roll call the following members were present: Lesley Forbush (via Zoom due to the pandemic), Deb White, Adam Voigts, Mike Rozga, and Lori Smith. Absent: None.

No public comments were offered.

Smith moved to approve the Consent Agenda. White seconded it. Question was called for and on voice vote the Chairperson declared the motion carried unanimously. The consent agenda was as follows:

- Approval of Minutes of the prior board meetings.

Electric Superintendent Mike Metcalf reported staff is working on the budget and plant maintenance.

Rozga moved to authorize Warren Water to serve a customer within their territory upon proper notice to IMU since the customer is within two miles of IMU territory, located at 14694 Kennedy Street. White seconded it. Question was called for and on voice vote, the Chairperson declared the motion carried unanimously.

Water Superintendent Lou Elbert informed the Board that there were four water main breaks last week. The staff is also performing winter maintenance at the plant.

Smith moved to approve Resolution 2021-006 setting a public hearing for February 14, 2022 for the Fiber Extension to the Water Resource Recovery Facility Project. White seconded it. On roll call, the vote was AYES: Forbush, White, Voigts, Rozga and Smith. NAYS: None. Whereas the Chairperson declared the motion carried unanimously.

Communications Utility Superintendent Kurt Ripperger reported staff is performing installations for new customers.

White moved to approve Resolution 2022-007 setting a public hearing for February 28, 2022 for the Fiscal Year 23 budget. Rozga seconded it. On roll call, the vote was AYES: Forbush, White, Voigts, Rozga and Smith. NAYS: None. Whereas the Chairperson declared the motion carried unanimously.

Robert Endriss, Denman and Company, presented the Fiscal Year 21 audit. Highlights of the presentation included: Statement of Net Position; Statement of Revenues, Expenses and Changes in Net Position; Report on Internal Control over Financial Reporting and on Compliance; and a Schedule of Findings. Discussion included the transition from a cash to accrual basis, reporting, and inventory.

General Manager Chris DesPlanques reviewed the proposed IMU mission statement with the Board. No changes were recommended. Des Planques stated the statement would be incorporated into the strategic plan document that will be brought forward to a future board meeting for approval.

The Board directed staff to review the physical requirements for the general manager job description and then bring a revised version back for formal approval.

Supervisors Metcalf, Elbert and Ripperger reviewed their capital budgets. The Board requested additional estimates for some line items and discussed possible staffing needs and rate changes.

In other business, Des Planques informed the Board that MEAN voted to increase wholesale rates by 6%; IAMU has filed a lawsuit against IUB on late fee and notice restrictions; and that there is discussion at the State level on solar restrictions, which may have an impact on IMU's solar project plans.

White moved to enter into closed session at 7:20 p.m. in accordance with Iowa Code Section 388.9(1) to discuss marketing and pricing strategies and proprietary information of the telecommunications division whose competitive position will be harmed by public disclosure that is not required of potential or actual competitors and no public purpose is served by such disclosure. Smith seconded it. On roll call, the vote was AYES: Forbush, White, Voigts, Rozga and Smith. NAYS: None. Whereas the Chairperson declared the motion carried unanimously.

At 8:22 p.m., Rozga moved to exit the closed session and Smith seconded it. On roll call, the vote was AYES: Forbush, White, Voigts, Rozga and Smith. NAYS: None. Whereas the Chairperson declared the motion carried unanimously.

Rozga moved to adjourn at 8:22 p.m.and White seconded it. Question was called for and on voice vote the Chairperson declared the motion carried unanimously.

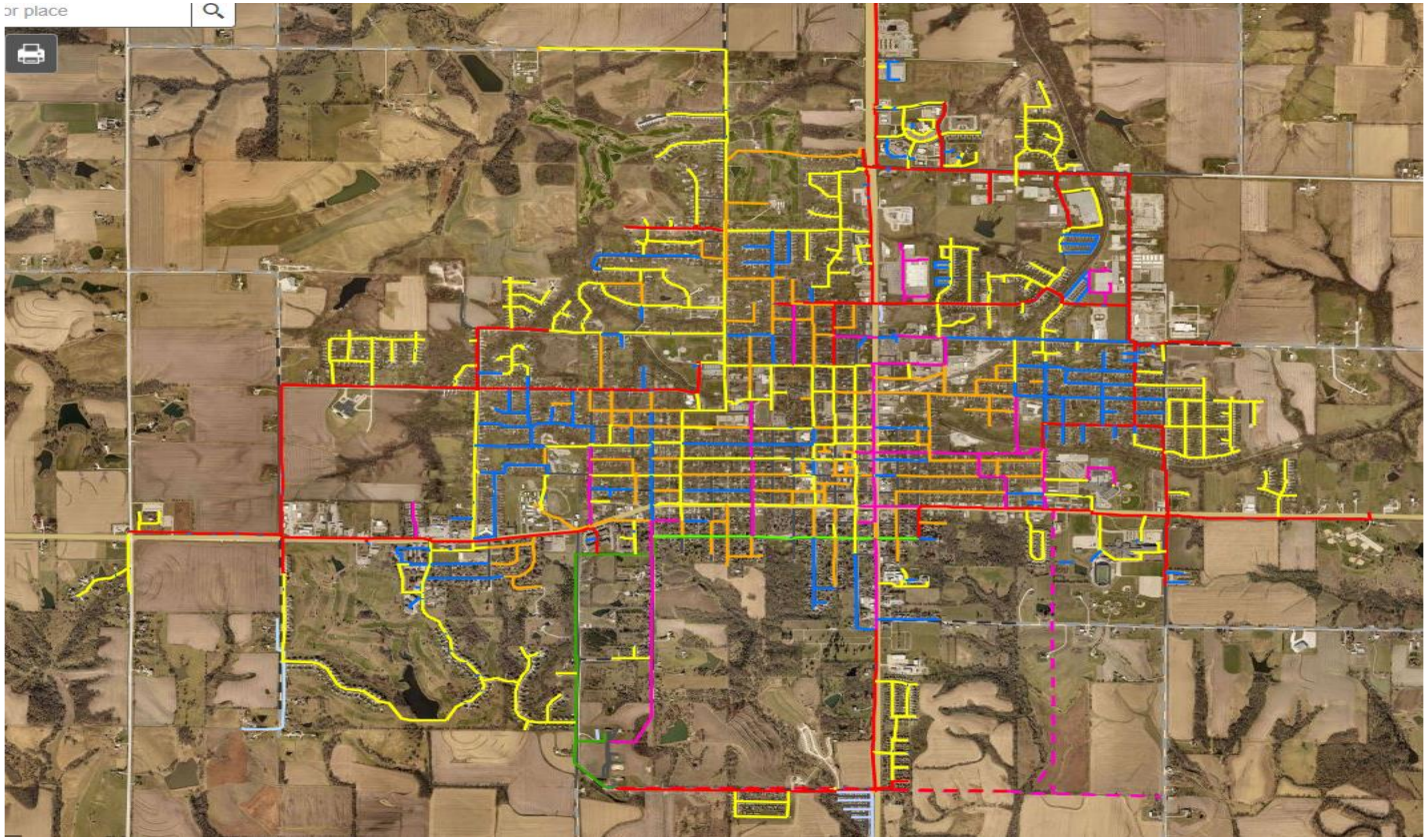
Adam Voigts, Chairperson

ATTEST:

Jackie Raffety, City Clerk

Water Main Maps

System Map



Legend

Stop Box

- Ball
- Corps
- Gate
- Meter Pit
- <all other values>

Clamps

- Band Clamp
- Hi-Max Clamp
- Vented Clamp
- Other
- Other Fitting Types

Hydrants

- Blow Off
- Dry-Barrel
- Other

System Valves

- Butterfly
- Gate
- Other System Valve

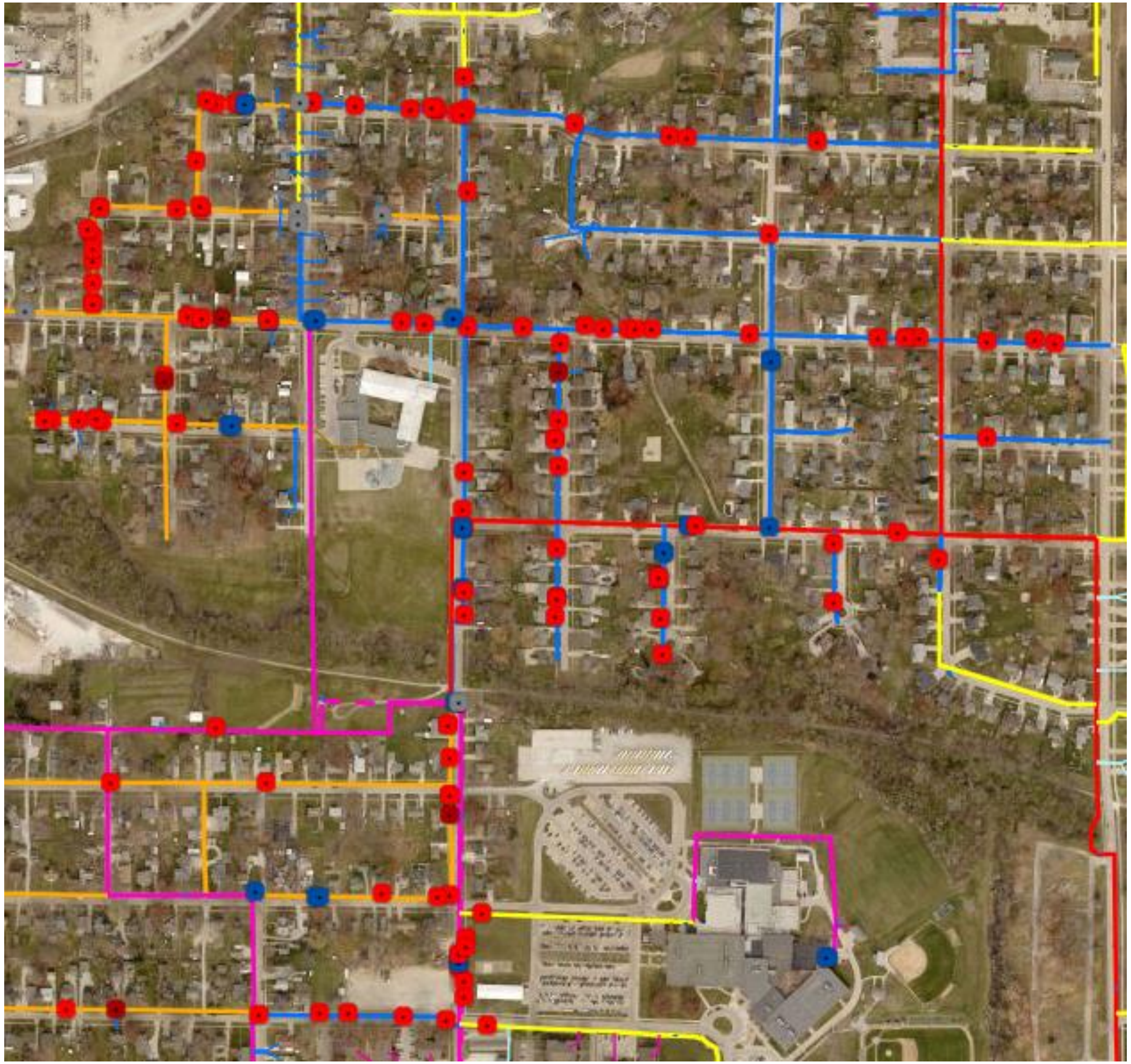
Service Lines

- 1"
- 3/4"
- 1 1/2"
- 2"
- 3"
- 4"
- 6"
- 8"
- Other

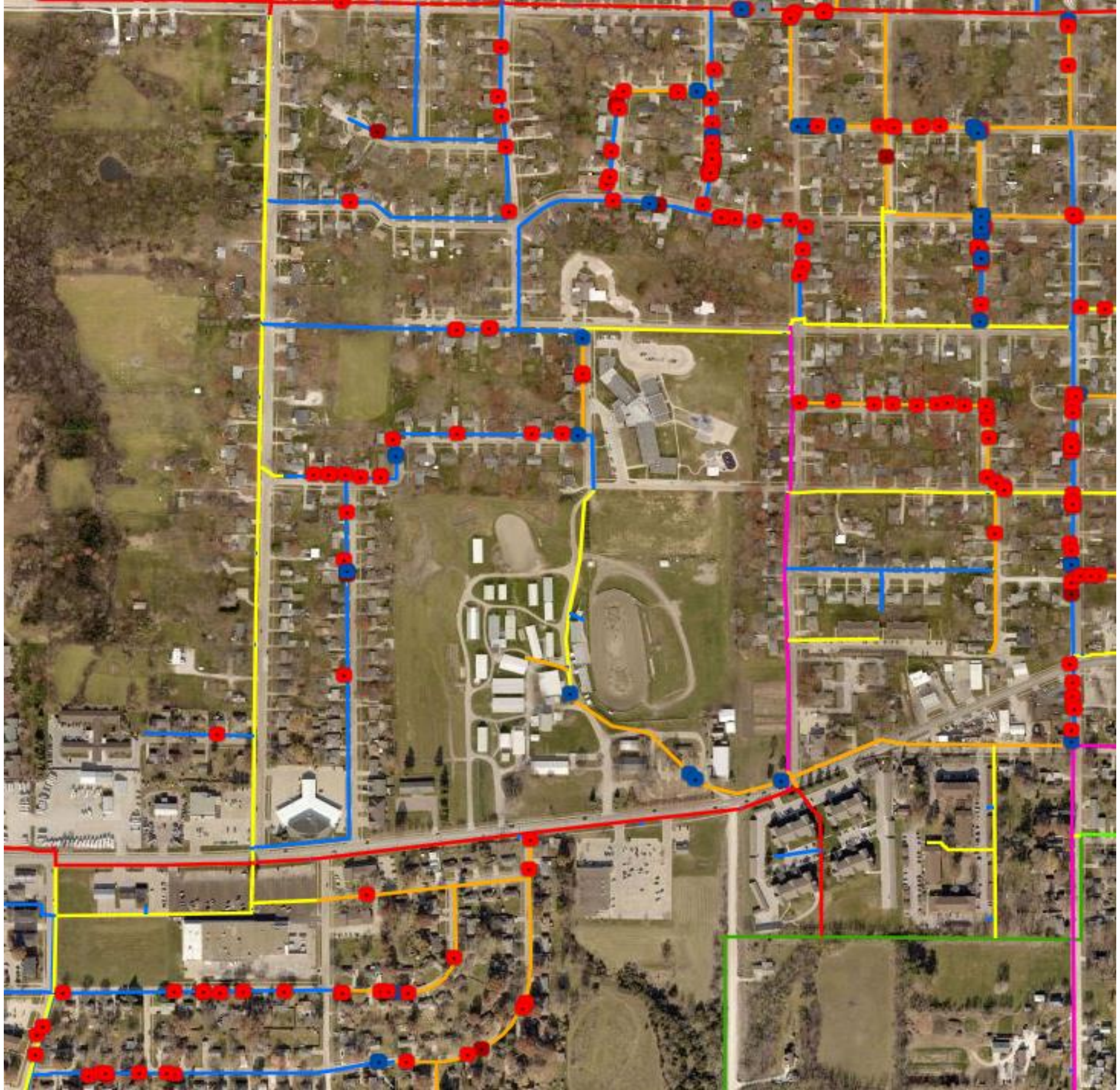
Potable Water Mains

- 2"
- 3"
- 4"
- 6"
- 8"
- 10"
- 12"
- 16"
- 20"
- Other

East Side



West Side



MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Fiber Extension Project

Recommendation:

Attachments:
1. Bid Specifications
2. WRRF Estimate

PROJECT PLANS AND SPECIFICATIONS:

Fiber Network Extension to Water Resource Recovery Facility

PREPARED FOR

Indianola Municipal Utilities
Indianola, Iowa
Attention: Kurt Ripperger, Communications Superintendent
110 S B Street
PO Box 356, Indianola, Iowa 50125
515-962-5283

JANUARY 10, 2022

BY

NewCom Technologies, Inc.
6000 Grand Avenue
Des Moines, Iowa 50312
515/274-9611
515/274-9622 (FAX)

PLANS AND SPECIFICATIONS FOR

Fiber Network Extension to Water Resource Recovery Facility

INDIANOLA MUNICIPAL UTILITIES
INDIANOLA, IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signed: Bethany Kephart Dated: January 10, 2022

Bethany Kephart, P.E.
Iowa License No. 17120
My license renewal date is December 31, 2023

Detailed parts covered by this seal: Specifications – all pages

Prepared by
NewCom Technologies, Inc.
6000 Grand Ave, Des Moines, Iowa 50263

TABLE OF CONTENTS
FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY

INDIANOLA MUNICIPAL UTILITIES
INDIANOLA, IOWA

Contents

Part I – Contract Forms

1. NOTICE OF HEARING AND LETTING

NOTICE OF PUBLIC HEARING ON PROPOSED PLANS, SPECIFICATIONS, FORM OF CONTRACT AND ESTIMATE OF COST FOR THE FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY PROJECT, INDIANOLA MUNICIPAL UTILITIES, INDIANOLA, IOWA, AND FOR THE TAKING OF BIDS THEREFORE.

****

Sealed proposals will be received by the Clerk of the Indianola Municipal Utilities (IMU) at the IMU Office Building located at 210 W. 2nd Avenue, Indianola, Iowa 50125 until 1:00 P.M. local time on February 7th, 2022, for the Fiber Network Extension To Water Resource Recovery Facility Project, as described in the plans and specifications therefore, now on file in the office of the Clerk. Proposals will be opened, and the amount of the bids announced in said IMU meeting by the Clerk at 3:00 P.M. local time on February 7th 2022, at the IMU Office Building.

At 5:30 P.M. on the 14th day of February 2022, the Board of Trustees of Indianola Municipal Utilities will hold a hearing and said Board of Trustees proposes to adopt plans, specifications, form of contract and estimate of cost and, at the time, date and place specified above, or at such time, date and place as then may be fixed, to act upon proposals and enter into a contract for the construction of said improvements.

The location of the work to be done and the kinds and sizes of materials proposed to be used are as follows:

<u>FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY</u>

Construction of an optical fiber network which splices into an existing IMU fiber facility and extends the IMU fiber facility to a point outside of the Indianola Water Resource Recovery Facility. IMU will provide all fiber optic cable, handholes and splice cases/trays to complete this project. The bid includes all other materials; conduit, fittings, locate test stations, marker posts, mule tape and other miscellaneous materials necessary for installation and all labor for installation of the support structure and fiber network including splicing and testing to complete the project. Alternately, IMU may elect to complete the installation of the fiber cable, splice cases and fiber splicing using IMU's technical staff. The project consists of a total running line footage of approximately 7,860 feet of HDD type construction. The project is to be completed by April 22, 2022.

All work and materials are to be in accordance with the proposed plans, specifications, form of contract and estimate of cost now on file in the office of the Clerk of said Utilities and by this reference made a part thereof as though fully set out and incorporated herein.

All proposals and bids in connection therewith shall be submitted to the Clerk of said Utilities on or before the time herein set for said hearing. All proposals shall be made on official bidding blanks furnished by the Board, and any alterations in the official form of proposal will entitle the Board, at its option, to reject the proposal involved from consideration. Each proposal shall be sealed and plainly identified. The bid security should be made payable to the INDIANOLA MUNICIPAL UTILITIES. The bid security must not contain any conditions either in the body or as an endorsement thereon. The bid security shall be forfeited to the Board as liquidated damages in the event the successful bidder fails or refuses to enter a contract within 15 days after the award of contract and post bond satisfactory to the Board insuring the faithful fulfillment of the contract and the maintenance of said work, if required, pursuant to the provisions of this notice and the other contract documents. Bidders will use the bid bond form included in the specifications.

At said hearing, the Board of Trustees will consider the proposed plans, specifications, form of contract and estimate of cost for the project, the same now being on file in the office of the Clerk, reference to which is made for a more detailed and complete description of the proposed improvements, and at said time and place the said Board of Trustees will also receive and consider any objections to said plans, specifications and form of contract or to the estimated cost of said improvements made by any interested party.

By virtue of statutory authority, a preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa statutes.

The Board of Trustees reserves the right to reject any or all bids, to waive informalities or technicalities in any bid and to accept the bid which it deems to be to the best interest of the Board.

The successful bidder will be required to furnish bond in an amount equal to one hundred percent (100%) of the contract price, said bonds to be issued by responsible surety approved by the Board and shall guarantee the faithful performance of the contract and the terms and conditions therein contained, and shall guarantee the prompt payment for all materials and labor and protect and save harmless the Board from claims and damages of any kind caused by the operations of the Contractor, and shall guarantee the work against faulty workmanship and materials for a period of two (2) years after its completion and acceptance by the Board of Trustees.

The work will commence within ten (10) calendar days after the date set forth in written Notice to Proceed. All work on the project shall be completed by April 22, 2022.

Payment to the Contractor will be on the basis of monthly estimates equivalent to ninety-five percent (95%) of the contract value of the work completed and materials delivered to the site during the preceding calendar month. Estimates will be prepared on the first day of each month by the Contractor, subject to the approval of the Engineer, who will certify to the Board for payment each approved estimate on or before the tenth (10^{th}) day of the following month. Such monthly payments shall in no way be construed as an act of acceptance for any part of the work partially or totally completed.

Partial lien waivers are not required with the first payment application if payment is less than fifty (50%) of the contract amount. Each subsequent payment application shall be accompanied by the Contractor’s partial waiver, and by partial waivers from all assigned subcontractor(s), vendor(s), and suppliers who were included in the immediately preceding payment application, to the extent of that payment, as reflects on the payment application form.

Partial lien waivers from the Contractor and all assigned subcontractor(s), vendor(s), and suppliers shall accompany the first payment application when the amount of payment exceeds fifty percent (50%) of the total contract amount. Lien waivers are to be in the amount reflected on the payment application form.

Upon completion of the work and its acceptance by the Board, the Contractor will be paid an amount which, together with previous payments, will equal ninety-five percent (95%) of the contract price of the contract. Final payment of the remaining five percent (5%) will be made not less than thirty-one (31) days after completion and acceptance by resolution of the Board of Trustees of the completed contract, subject to the conditions and in accordance with the provisions of Chapter 573 of the Code of Iowa. No such partial or final payments will be due until the Contractor has certified to the Clerk that the materials, labor and services involved in each estimate have been paid for in accordance with the requirements stated in the specifications.

The Contractor’s request for final payment shall include final lien waivers, on Owner forms, from all assigned subcontractor(s), subcontractor(s), vendor(s), and suppliers in the full amount of their contracts as reflected on the payment application form. The Contractor shall also furnish its own final waiver of lien as reflected on the payment application form.

Liquidated damages in the amount of One thousand and Five Hundred Dollars ($1,500.00) per consecutive calendar day will be assessed for each day that the work remains uncompleted after the end of the contract period, with due allowance for extensions of the contract period due to conditions beyond the control of the Contractor.

Plans and specifications governing the construction of the proposed improvements, and also the prior proceedings of the Board of Trustees referring to and defining said proposed improvements are hereby made a part of this notice and the proposed contract by reference and the proposed contract shall be executed in compliance therewith.

Copies of said plans and specifications and form of contract are now on file in the office of the Clerk. Electronic copies may be obtained from NewCom Technologies, Inc., 6000 Grand Ave., Des Moines, Iowa 50312, at no charge.

This notice is given by order of the Board of Trustees of the Indianola Municipal Utilities, Indianola, Iowa.

Board of Trustees
Indianola Municipal Utilities
Indianola, Iowa

Adam Voigts, Chairperson

ATTEST:
Jackie Raffety, Asst. Finance Director/City Clerk

2. INIVITATION FOR BID

INIVITATION FOR BID FOR FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY PROJECT, INDIANOLA MUNICIPAL UTILITIES, INDIANOLA, IOWA

Contractors are allowed and encouraged to drive-out the project and inspect all areas to aid in an accurate bid and generate questions anytime through January 26th, 2022.

Sealed bids will be received by the Indianola Municipal Utilities hereinafter referred to as the "Owner" at the front counter of the Indianola Municipal Building, 210 W. 2nd Avenue , Indianola, Iowa, 50125 until 1:00 P.M. local time on February 7, 2022. It is expected the Board of Trustees of the Indianola Municipal Utilities will accept a bid or reject all bids at the public meeting on February 14, 2022, at 5:30 P.M.

IMU will accept written bidders' questions from January 11th to January 31th, 2022 and will post written responses to all bidders on or before February 2nd, 2022. Questions should be submitted by way of email addressed to Beth Kephart, Engineer of Record at BKephart@NewComTech.com with copy to NewCom@NewComTech.com.

On or before January 14th, 2022, bidders are to notify the Engineer of Record of their intent to bid along with their qualifications.

A pre-construction conference will be held by or before March 1, 2022 with the winning bidder, before which a Notice to Proceed will officially be given.

The work to be done at the location shown on the plans includes construction of the 2022 Fiber Network Extension To Water Resource Recovery Facility Project for the Iowa Municipal Utilities, including all labor, materials and equipment necessary to construct the link, including cleanup and restoration.

Before submitting a bid, each Bidder should (a) examine the Contract Documents thoroughly; (b) visit the sites to familiarize him/herself with local conditions that may, in any manner, affect cost, progress or performance of the Work; (c) familiarize him/herself with federal, state, and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work; and (d) study and carefully correlate Bidder's observations with the Contract Documents.

All questions regarding the meaning or intent of the Contract Documents shall be submitted in writing via email to Bethany Kephart, Engineer of Record at BKephart@NewComTech.com and CC: NewCom@NewComTech.com. Any inquiry received five (5) or more days prior to the date fixed for the opening of bids will be given consideration. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications shall be without legal effect. Any and all such interpretations and any supplemental instructions will be in the form of written Addenda which, if issued, will be posted on NewCom Technologies' ShareFile site and at www.mbionline.com prior to the date fixed for the opening of Bids. All parties who have notified the Project Engineer of their interests, will receive notification via email of all addendum postings. However, it will be the Bidder's responsibility to verify with the Project Engineer that all Addenda have been received. All Addenda so issued shall become part of the Contract Documents, and all Bidders shall be bound by such addenda, whether or not received by the Bidder.

Award of the Contract will be made to the lowest responsible/responsive Bidder. Lowest Bid will be determined by the lowest Base Bid, exclusive of any Alternates, Allowances, or Unit Prices.

Indianola Municipal Utilities reserves the right to reject all bids when it determines that such action is in the public interest.

Bids submitted early may be modified or withdrawn by notice to the party receiving bids at the place and prior to the time designated for receipt of bids. Such notice shall be in writing and signed by the Bidder or by email, if permitted by the Project Manager. If by email, signed written confirmation of the change by the Bidder must have been mailed and postmarked on or before the date and time set for receipt of bids. Modifications or changes shall be so worded as not to reveal the amount of the original bid. Bids may also be modified or withdrawn in person by the Bidder or an authorized representative provided he can prove his identity and authority. Withdrawn bids may be resubmitted up to the time designated for the receipt of bids provided that they are then fully in conformance with these Instructions to Bidders and the Bid Security is in an amount sufficient for the bid as modified or resubmitted.

The person, firm or corporation submitting the successful bid, hereinafter referred to as the "Contractor", will be notified on February 15th, 2022 that their bid has been accepted. Work on the project shall commence within ten (10) calendar days after the date set forth in written Notice to Proceed. All work on the project shall be completed by April 22, 2022

Liquidated damages in the amount of One thousand and Five Hundred Dollars ($1,500.00) per consecutive calendar day will be assessed for each day that the work on the fiber network remains uncompleted after April 22, 2022.

In accordance with the requirements of the Iowa Department of Labor all bidders must submit a fully completed Bidder Status Form. The Bidder Status Form must be included with and is considered an essential attachment to the Bid. Any bid that does not include a fully completed Bidder Status Form may result in the bid being determined non-responsive.

The Contractor submitting the successful bid will be required to furnish bond in an amount equal to one hundred percent (100%) of the contract price, said bond to be issued by a responsible surety approved by the Board of Trustees and shall guarantee the faithful performance of the contract and the terms and conditions therein contained and shall guarantee the prompt payment for all materials and labor and protect and save harmless the Owner from claims and damages of any kind caused by the operations of the Contractor, and shall guarantee the work against faulty workmanship and materials for a period of two (2) years after its completion and acceptance by the Board of Trustees.

The Contractor will be paid ninety-five percent (95%) of the Owner's final estimate of the value of acceptable work completed. Final payment will be made no earlier than thirty-one (31) days after completion of the work and acceptance by the Owner.

No such final payment will be due until the Contractor has certified to the Owner that the materials, labor and services involved in the final estimate have been paid for in full.
The Contractor’s final request shall include final lien waivers.

3. BID

FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY PROJECT
INDIANOLA MUNICIPAL UTILITIES
INDIANOLA, IOWA

Name of Firm ____
____

Address of Firm ____
____

To: Board of Trustees
Indianola Municipal Utilities
210 W 2nd Avenue
Indianola, Iowa 50125

The undersigned, having examined the plans and having become familiar with the nature and location of the work to be done and the conditions under which the work will be performed, hereby proposes to provide the required labor, services, and materials and to perform the work described on the plans, within the time and for the sums stated hereinafter on attached Bid Schedule, which Bid Schedule is hereby made a part of this Bid.

The undersigned certifies that this Bid is offered in good faith, without collusion or connection with any other persons quoting on the work.

The undersigned states that this Bid is offered in conformity with the plans and scope of work and agrees that in the event of any discrepancies or differences between any conditions of his quotation and the scope of work prepared by NewCom Technologies, Inc. that the provisions of the latter shall prevail.

Name of Firm ______________________________

By ______________________________

Title ______________________________

Signature ______________________________

Date ______________________________

BID SCHEDULE

FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY PROJECT

1. Construct the fiber optic network for the following unit and lump sum prices.
   For materials supplied by IMU, include bid on labor, transport, etc.:

Item No.	Description	Unit	Estimated Quantity	EACH (See Note 1)	Total Price (See Note 1)
1	Underground - Directional Drilled: Furnish & Install, 1.5" Conduit with mule tape	LF	7,860	$	$
2	Ground Rods and ground kits: Furnish and Install	EA	3		
3	Fiber Marker Posts with Test Stations: Furnish and Install	EA	3	$	$
4	Fiber Marker Posts: Furnish and Install	EA	8	$	$
5	24x36x24 Hand Hole: Install Only	EA	12	$	$
6	13x24x24 Hand Hole: Install Only	EA	7		
7 (See Note 2)	Armored Fiber Optic Cable Installation (72 count or 96 count): Install Only	LF	9,060	$	$
8 (See Note 2)	B Size Splice Cases with Trays Installation: Install Only	EA	2	$	$
9 (See Note 2)	Splicing and Testing per Fiber Strands	EA	84	$	$
Note (1): Price must include any state and local tax and freight ***Note (2): Alternate item pricing, as IMU may elect to perform these items with internal staff***					

TOTAL BID
including Tax and
Freight
(Items 1 through 9) $ ____________________

2. Required attachment:
   - Bidder Status Form

Bidder Status Form

To be completed by all bidders — Part A

Please answer "Yes" or "No" for each of the following:

☐ Yes ☐ No My company is authorized to transact business in Iowa.
(To help you determine if your company is authorized, please review the worksheet on the next page).

☐ Yes ☐ No My company has an office to transact business in Iowa.

☐ Yes ☐ No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.

☐ Yes ☐ No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.

☐ Yes ☐ No My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered "No" to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders — Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: ____/____/____ to ____/____/____ Address:____________

City, State, Zip:____________

Dates: ____/____/____ to ____/____/____ Address:____________

City, State, Zip:____________

Dates: ____/____/____ to ____/____/____ Address:____________

You may attach additional sheet(s) if needed City, State, Zip:____________

To be completed by non-resident bidders — Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

____

2. Does your company's home state or foreign country offer preferences to bidders who are residents? ☐ Yes ☐ No

3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

____

____

You *may attach additional sheet(s) if needed.*

To be completed by all bidders

I certify that the statements made on this document are true and complete to the best of my knowledge **and ;** know that my failure to provide accurate and truthful information may be a reason to reject my bid.

Firm **Name:** ____________

Signature:

You must submit the completed form to the governmental body requesting bids per 876 Iowa Administrative Code Chapter 156.
This form has been approved by the Iowa Labor Commissioner.

309-6001 02-14

Date:

Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

❑ Yes ❑ No My business is currently registered as a contractor with the Iowa Division of Labor.

❑ Yes ❑ No My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.

❑ Yes ❑ No My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.

❑ Yes ❑ No My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.

❑ Yes ❑ No My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.

❑ Yes ❑ No My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.

❑ Yes ❑ No My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.

❑ Yes ❑ No My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.

❑ Yes ❑ No My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.

My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.

❑ Yes ❑ No My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

❑ Yes ❑ No

4. CONTRACT

THIS AGREEMENT, made and entered into this day of , 20______,

by and between the Indianola Municipal Utilities, Indianola, Iowa, party of the first part, hereinafter referred to as the "Owner", and

____

party of the second part, hereinafter referred to as the "Contractor".

WITNESSETH: THAT WHEREAS, the Owner has heretofore caused to be prepared certain plans, specifications and proposal blanks, dated the ___________ day of ____________ , 20______, for the Facility Fiber Network Extension To Water Resource Recovery under the terms and conditions therein fully stated and set forth, and,

WHEREAS, said plans, specifications and proposal blanks accurately and fully describe the terms and conditions upon which the Contractor is willing to perform the work specified:

NOW, THEREFORE, IT IS AGREED:

1. That the Owner hereby accepts the proposal of the Contractor for the work, as follows:

2. That this contract consists of the following component parts which are made a part of this agreement and contract as fully and absolutely as if they were set out in detail in this contract:

   2.1 Contract Documents, including:

      2.1.1 Invitation for Bid
      2.1.2 Bid Form
      2.1.3 Bond
      2.1.4 General Conditions
      2.1.5 Special Conditions
      2.1.6 Drawings and Specifications
      2.1.7 Numbered addenda issued to the foregoing

   2.2 The above components are complementary and what is called for by one shall be as binding as if called for by all.

3. Payments are to be made to the Contractor in accordance with and subject to the provisions embodied in the documents made a part of this contract.

4. That this contract is executed in triplicate.

IN WITNESS WHEREOF, the parties here to have here unto set their hand and seals the date first written above.

CONTRACTOR:

INDIANOLA MUNICIPAL UTILITIES
INDIANOLA, IOWA

By ______________________________

Title ______________________________

ATTEST:

____

Title ______________________________

ATTEST:

____
Secretary

______________________________ By ______________________________
Chairperson, Board of Trustees

5. BOND

KNOW ALL PEOPLE: That we, ____
of __________________________________, hereinafter called the Principal, and

____

hereinafter called the Surety, are held and firmly bound unto the Indianola Municipal Utilities, Indianola, Iowa, hereinafter called the Owner, in the sum of

____

Dollars ($ __________), for the payment whereof the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly, by these presents.

WHEREAS, the Principal has, by means of a written Agreement dated _________________ 20_, entered into a Contract with the Owner for the Facility Fiber Network Extension To Water Resource Recovery Facility Project, which Agreement includes a guarantee of all work against defective workmanship and materials for a period of two (2) years from the date of final acceptance of the work by the Owner, a copy of which Agreement is by reference made a part hereof;

Now Therefore, the condition of this Obligation is such that, if the Principal shall faithfully perform the Contract on his part and shall fully indemnify and save harmless the Owner from all cost and damage which he may suffer by reason of failure so to do and shall fully reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any such default,

And Further, that if the Principal shall pay all persons who have contracts directly with the Principal for labor or materials, failing which such persons shall have a direct right of action against the Principal and Surety under this Obligation, subject to the Owner's priority,

Then this Obligation shall be null and void, otherwise it shall remain in full force and effect.

Provided, however, that no suit, action or proceeding by reason of any default whatever shall be brought on this Bond after three (3) years from the date of final acceptance of the work.

And Provided, that any alterations which may be made in the terms of the Contract, or in the work to be done under it, or the giving by the Owner of any extension of time for the performance of the Contract, or any other forbearance on the part of either the Owner or the Principal to the other shall not in any way release the Principal and the Surety, or either of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety of any such alteration, extension or forbearance being hereby waived.

And Further Provided, the Principal and Surety on this Bond hereby agree to pay all persons, firms, or corporations having contracts directly with the Principal or with subcontractors all just claims due them for labor performed or material furnished, in the performance of the Contract on account of which this Bond is given, when the same are not satisfied out of the portion of the contract price which the Owner shall retain until completion of the improvements, but the Principal and Surety shall not be liable to said persons, firms, or corporations unless the claims of said claimants against said portions of the contract price shall have been established as provided by law

The Surety on this Bond shall be deemed and held, any contract to the contrary not withstanding, to consent without notice:

a. To the extension of time to the Principal in which to perform the Contract.

b. To changes in the plans, specifications, or Contract, when such changes do not involve an increase of more than twenty percent (20%) of the total contract price, and shall then be released only as to such excess increase.

c. That no provision of this Bond or of any other contract shall be valid which limits to less than three (3) years from the date of final acceptance of the work the right to sue on this Bond for defects in workmanship or materials not discovered or known to the Owner at the time such work was accepted.

The Bond is executed in triplicate.

Signed and Sealed this ________day of _______________,20_____ .

PRINCIPAL_______________________________________

Contractor_______________________________________

Signature_______________________________________

Title _______________________________________

SURETY:_______________________________________

Surety Company _______________________________________

Signature, Attorney-in-Fact_______________________________________

Name of Attorney-in-Fact_______________________________________

Company Name_______________________________________

Company Address (Including Zip Code)_______________________________________

Company Telephone Number_______________________________________

Part II – General Conditions

1. CONTRACT DOCUMENTS

1.1 All documents listed or identified as part of contract are each and all essential and component parts of agreement between Owner and Contractor.

1.2 Contract Documents shall be signed in triplicate by Owner and Contractor.

1.3 Contract Documents are complementary, and what is called for by anyone shall be as binding as if called for by all. The intention of documents is to include all labor and materials, equipment, and transportation necessary for proper execution of work. It is not intended that materials or work not covered by or properly inferable from any heading, branch, class, or trade of the specifications shall be supplied unless distinctly noted. Materials or work described in words, which have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

2. SURETY BOND

2.1 Contractor shall furnish a good and sufficient surety bond in full amount of contract prior to signing contract. Surety bond shall guarantee faithful performance of all provisions of contract and payment of all bills and obligations arising from said contract. Should surety become irresponsible during time contract is in force, Owner may require additional and sufficient sureties. Contractor shall furnish said additional sureties to satisfaction of Owner within ten (10) days after written notice to do so. In default thereof, contract may be suspended as hereinafter provided.

3. CONTRACTOR'S RESPONSIBILITY

3.1 Contractor shall assume full responsibility for safekeeping of all materials and equipment and for all unfinished work until final acceptance by Owner. Materials and equipment which are damaged or destroyed from any cause shall be replaced at Contractor's expense.

3.2 Contractor shall indemnify and save harmless Owner against any liens filed for non-payment of Contractor's bills in connection with contract work. Contractor shall furnish Owner satisfactory evidence that all persons who have done work or furnished materials, equipment, or service of any type, under the contract have been fully paid prior to acceptance of work by Owner.

3.3 Contractor shall erect and maintain such barriers and lights as will prevent accidents as a consequence of its work. It shall indemnify and save harmless the Owner and its agents from all suits brought against Contractor for any injuries received or sustained by any person or persons by or through Contractor, its servants, or agents, in construction of work, or by or in consequence of any acts or omissions or negligence in performing contract work.

3.4 Without limiting GENERAL REQUIREMENTS of Contract Documents, protect flag poles, sidewalks, streets, pavements, fences, pipe, conduit, utilities, trees, shrubs, and structures not shown for removal.

3.5 Cooperate with Owner, Engineer, and representative of utilities in locating underground utility lines and structures; incorrect, inaccurate, or inadequate information concerning location of utilities or structures shall not relieve Contractor of responsibility for damage thereto caused by his operations.

4. SUBCONTRACT DOCUMENTS

4.1 Contractor shall not assign, sub-let, or transfer the whole or any part of work herein specified without written consent of Owner. Assignment, sub-letting or transfer shall not relieve Contractor from its responsibilities set forth herein.

4.2 Detailed specifications are separated into titled parts for convenience or reference and to facilitate letting of contracts and subcontracts. Such arrangement shall not obligate Engineer to establish limits on contracts between Contractors and subcontractors.

5. CONTRACTOR'S EMPLOYEES

5.1 Contractor shall personally supervise its work or provide a capable superintendent satisfactory to Engineer. Superintendent shall be authorized to receive instructions from Engineer.

5.2 Incompetent or incorrigible employees shall be dismissed by the Contractor or its representative when requested by Engineer. Such dismissed persons shall not be permitted to return to work without written consent of Engineer.

5.3 Contractor shall give preference to local labor in execution of this contract, insofar as is practicable.

6. PERMITS AND REGULATIONS

6.1 In execution of work specified herein, Contractor shall conform to regulations and ordinances of any governmental body which may apply in execution of specified work. Contractor shall obtain such permits and licenses as may be required for construction of work.

7. PATENTS

7.1 All fees or royalties for patented inventions, equipment or arrangements used in construction or erection of work, or any part thereof, shall be included in contract price. Contractor shall protect and hold harmless Owner against any and all claims or litigation by reason of infringement of any patent rights on any materials, equipment of construction furnished by Contractor.

8. GUARANTEE

8.1 Contractor shall guarantee all work against faulty workmanship and materials for

the period specified after date of final acceptance of work by Owner unless otherwise set out in "SPECIAL CONDITIONS" or "INSTRUCTIONS TO BIDDERS." Contractor shall repair or replace any defective workmanship and materials in a manner acceptable to Owner, without expense to Owner, within ten (10) days after written notification by Owner of such defect. If said repairs or replacements are not made within ten (10) days, Owner may make said repairs or replacements and charge the cost to Contractor.

8.2 Contractor shall provide Owner with a good and sufficient surety maintenance bond in the full amount of contract prior to signing contract. Maintenance bond shall run for the period specified from time of acceptance to protect Owner from faulty workmanship and materials as outlined in preceding paragraph.

9. SHOP DRAWINGS

9.1 Contractor shall provide Engineer with drawings, data and information regarding materials or equipment specified, or as may be called for by Engineer, for its review, within a reasonable time after award of contract. After review, Engineer shall return to Contractor one copy within a reasonable time after receipt.

9.1.1 Submit 1 copy of all shop drawing submittals.

9.2 Fabrication and shipment of materials or equipment prior to Engineer's review of drawings, data and information mentioned above shall be at Contractor's risk.

10. THE ENGINEER

10.1 Engineer shall make general observation of work as agent of Owner. Engineer's general observation shall not be construed that it shall direct or control operations of Contractor.

11. PLANS AND SPECIFICATIONS

11.1 Engineer shall provide Contractor with one hard copy and one electronic file of plans and specifications after execution of contract. If additional plans and specifications are required, Contractor shall compensate Engineer for costs of printing.

11.2 Engineer shall provide Contractor with additional and supplemental plans as may be required to show details of construction after approval of manufacturers' drawings and data on materials and equipment.

11.3 Engineer will provide Contractor with such revised plans and specifications as may be required to show any authorized changes or extra work.

12. INTERPRETATION OF PLANS AND SPECIFICATIONS

12.1 Plans and specifications shall be interpreted by Engineer. Its decision shall be final and binding on all parties concerned.

12.2 Contractor will not be allowed to take advantage of errors or omissions in plans and specifications. Engineer will provide full instructions when errors or omissions are discovered.

13. DECISIONS BY ENGINEER

13.1 Engineer shall make decisions, in writing, on claims between Contractor and Owner within a reasonable time after presentation. Such decisions shall be regarded as final except for appropriate legal recourse.

14. WORKMANSHIP AND MATERIALS

14.1 All work done, and all materials and equipment furnished by Contractor shall conform to plans and specifications. Competent laborers and tradespersons shall be used on all work.

14.2 In absence of detailed specifications in other sections, all materials shall conform to standards of American Society for Testing Materials.

14.3 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, it is the intent that materials or equipment of other manufacturers, equal in quality and performance, may be substituted. Such substitution may be made only with written authorization of Engineer.

14.4 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, and additional features of items are specifically required by specifications, additional features specified shall be provided whether or not they are normally included in standard manufacturer's items listed.

14.5 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, and specified items are or become obsolete and no longer available, Contractor shall provide acceptable equal items which are currently available at no change in contract price.

14.6 When proposing "or equal" items or substitutions, Contractor shall furnish general arrangement drawings, full descriptive data, manufacturer's specifications, and such performance data as required to satisfy Engineer that materials or equipment proposed are equal to that specified. Burden of proof of equality shall be responsibility of Contractor.

14.7 Whenever items of materials or equipment are specified by a manufacturer's name and type and 'or equal" is not listed, Contractor shall provide specified equipment without substitution, unless prior approval of Engineer is obtained for any substitution.

14.8 Contractor shall abide by Engineer's decision when proposed substitutes of material or equipment are deemed to be unacceptable and in such an event Contractor shall furnish items of equipment or materials specified.

14.9 Engineer reserves right to consider such factors as overall project arrangement, overall project cost, and similar factors in determining whether proposed substitutions will be acceptable.

15. ON-SITE REVIEW OR OBSERVATION

15.1 All materials used, and all work done by Contractor shall be subject at all times to review, observation, and approval by Engineer. Contractor shall furnish samples of materials for observation as requested by Engineer. Contractor shall furnish any information required concerning nature or source of any proposed materials or equipment.

15.2 Materials, equipment or work which do not satisfactorily meet specifications may be condemned by Engineer by written notice to Contractor. Condemned materials, equipment or work shall be promptly removed and replaced.

15.3 Defective materials, equipment or work may be rejected by Engineer at any time prior to final acceptance by Owner even though said defective items may have been previously overlooked.

16. TIME

16.1 Contractor shall commence work within time specified and shall complete work within time specified in contract.

17. DELAYS

17.1 Delays caused by injunction or legal actions, damages by elements, or other causes beyond control of Contractor (of which Owner shall be sole judge) shall entitle Contractor to a reasonable extension of time within which to complete work.

17.2 Application for extension of time shall be made to Owner by Contractor and shall state reasons for request for extension of time.

17.3 No extension of time shall be valid unless made in writing by Owner.

17.4 Normal weather conditions shall not form the basis of request for extension of time. Abnormal weather conditions shall form basis of request for extension of time only to the delay in excess of that resulting from normal weather conditions.

18. CHANGES

18.1 Engineer shall have the right to make changes in location and quantities of work as may be deemed advisable with consent of Owner and without notice to sureties on Contractor's bond.

18.2 No change shall be made under this paragraph which will increase or decrease total contract amount more than twenty percent (20%) of original contract price and no changes shall be made in plan of improvement that would necessitate additional or different construction processes and equipment.

18.3 Amount due Contractor shall be adjusted for changes in following manner:

18.3.1 Where unit prices have been bid, these unit prices shall be used to compute adjustment in compensation.

18.3.2 Where no such unit prices have been bid, Engineer and Contractor shall negotiate a reasonable adjustment in Contractor's compensation. Limitations on compensation in 22.2 of "22. EXTRA WORK" shall apply to changes where compensation is negotiated.

18.3.3 No changes shall be authorized unless they are shown on revised plans or in written instructions of Engineer.

18.3.4 Authorized changes which require additional time to complete shall entitle Contractor to proportionate extension of time to completion which shall be determined by Engineer.

19. EXTRA WORK

19.1 Required extra work not specified under this contract shall be done at an agreed price satisfactory to Contractor and Owner, or on basis of actual cost of work plus not more than fifteen percent (15%) for Contractor's overhead and profit. Actual cost shall include expense for equipment, materials, and labor and shall include no overhead items or profit. Where extra work is done by a subcontractor, with approval of Owner, there may be included in Contractor's actual cost, ten percent (10%) for subcontractor's profit.

19.2 The term "extra work" as used herein shall not be construed to apply to changes described in "21. CHANGES".

19.3 No compensation shall be allowed Contractor for extra work unless such work has been authorized in writing by Engineer and approved by Owner.

19.4 Contractor shall submit a statement of costs to Engineer for approval when extra work is performed on an actual cost-plus basis. After such a statement is approved, Engineer shall certify its correctness to Owner.

20. OWNERSHIP OF MATERIALS

20.1 All materials and work covered by partial payments shall become sole property of Owner, but this provision shall not be construed as relieving Contractor from sole responsibility for all materials and work for which payments have been made, for restoration of damaged work, or as a waiver of rights of Owner to require fulfillment of all terms of contract.

21. OTHER CONTRACTS

21.1 Owner reserves right to let other contracts in connection with this work. Contractor shall afford other contractors' reasonable opportunity for introduction and storage of their materials and execution of their work, and shall properly connect and coordinate its work with theirs. There shall be no impediments for other Contractors to access materials and to coordinate with others on areas and schedule.

21.2 When proper execution of Contractor's work depends upon work of another contractor, it shall inspect other work and report any defects to Engineer. Contractor's failure to inspect and report shall constitute an acceptance of other contractor's work except for defects which may develop in work after completion.

22. OWNER'S RIGHT TO DO WORK

22.1 If Contractor neglects to prosecute work properly or fails to perform any provision of this contract, Owner, after three (3) days' written notice to Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies, and may deduct the cost thereof from the payment then or thereafter due the Contractor, provided, however, that Engineer shall approve both such action and amount charged to Contractor.

23. OWNER'S RIGHT TO TERMINATE CONTRACT

23.1 Owner, upon certification of Engineer that there is sufficient cause to justify termination of contract, may, without prejudice to any other right or remedy, and after giving Contractor seven (7) days' notice may terminate employment of Contractor for any of following reasons:

23.1.1 Contractor makes a general assignment for benefit of its creditors, or if adjudged as bankrupt.

23.1.2 Receiver is appointed on account of Contractor's insolvency.

23.1.3 Contractor persistently or repeatedly fails or refuses, except when extension of time to complete is granted, to provide enough skilled workmen or proper materials.

23.1 .4 Contractor fails to make prompt payment to subcontractors for material or labor.

23.1.5 Contractor persistently disregards laws and ordinances or instructions of Engineer.

23.1.6 Contractor violates a provision of contract.

23.2 If Owner terminates employment of Contractor, it shall take possession of premises and all materials. It shall finish work by whatever method it may deem expedient. In such case Contractor shall not be entitled to receive any further payment until work is finished.

23.3 If unpaid balance of contract price exceeds expense of finishing the work including compensation for additional managerial and administrative services, excess shall be paid to Contractor. If expense exceeds unpaid balance, Contractor shall pay difference to Owner. Expense incurred by Owner as herein provided, and damage incurred through Contractor's default, shall be certified by Engineer.

24. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

24.1 If Engineer fails to issue any certificate for payment within fifteen (15) days after it is due, or if Owner fails to pay to Contractor within thirty (30) days of its maturity and presentation, any sum certified by Engineer, then Contractor may, upon seven (7) days simultaneous written notice to Owner and Engineer, stop work or terminate this contract. If Contractor elects to stop work by written notice, work shall be resumed promptly upon payment by Owner. If Contractor elects to terminate this contract by written notice it shall recover from Owner payment for all work executed to date of notice and any loss sustained upon any plant or materials plus a reasonable profit.

25. PAYMENTS WITHHELD

25.1 Engineer may withhold or nullify the whole or a part of payment certificate, on account of subsequently discovered evidence, to such extent as may be necessary to protect Owner from loss on account of:

25.1.1 Defective work not remedied.

25.1.2 Claims filed or reasonable evidence indicating probable filing of claims.

25.1.3 Failure of Contractor to make payments properly to subcontractors or for materials or labor.

25.1.4 A reasonable doubt that contract can be completed for balance then unpaid.

25.1.5 Damage to another contractor.

25.1.6 Claims of Owner for liquidated damages.

25.2 Payments shall be made for amounts withheld when above grounds are removed.

26. ACCEPTANCE AND FINAL PAYMENT

26.1 When work has been satisfactorily completed, Engineer will certify Contractor's final estimate stating that work has been completed in accordance with terms and conditions thereof with qualifications, if any, as stated. Balance found to be due Contractor according to the terms of payment shall be paid by Owner as provided in contract, provided, however, that any state laws which designate manner of final payment shall be followed in lieu of manner of final payment outlined above. Prior to receipt of final payment, Contractor shall file with Owner a receipt in full from each manufacturer, subcontractor, and dealer for all equipment and materials used on the work and a complete release of all liens, including tax liens, which may have arisen from this contract and required statements from Contractor and all subcontractors of sales and use tax paid. In lieu thereof, Owner, at its option, may accept from Contractor a statement showing balance due on all accounts.

26.2 Making and acceptance of final payment shall constitute a waiver of all claims by Owner, except those arising from unsettled liens, from faulty work or materials appearing after final payment or from requirements of the specifications, and of all claims by Contractor, except those previously made and still unsettled.

27. SUSPENSION OF WORK

27.1 Owner may suspend the work, or any part thereof, at any time, by giving ten (10) days' written notice to Contractor. The work shall be resumed by Contractor within ten (10) days after date fixed in written notice from Owner to Contractor to do so.

27.2 If work, or any part thereof, shall be suspended and if Owner does not give written notice to Contractor to resume work within one (1) year of date of suspension, Contractor may abandon suspended portion of work. Contractor will be entitled to estimates and payments for all work done on the portions so abandoned, if any.

28. CLEANING UP

28.1 Contractor shall keep premises free from accumulations of waste material or rubbish caused by its employees or work. After completion of work it shall remove all its rubbish and all its tools, scaffolding and surplus materials from work site. It shall leave its work "broom clean" or its equivalent, unless more exactly specified. In case of dispute the Owner may remove rubbish and charge costs to Contractor as Engineer shall determine to be just.

29. HAZARDOUS MATERIALS

29.1 The use of Asbestos Construction Building Materials (ACBM) is specifically prohibited. The Contractor, suppliers, and subcontractors shall warrant that all products used are asbestos free. In the event that a specified product contains asbestos, it shall be the responsibility of the Contractor to notify the Owner so that an appropriate substitution can be made in a timely manner so as not to delay the project.

29.2 The Contractor shall provide the Owner a certificate that warrants that no materials, products, items, or equipment contains any asbestos upon completion of the work of this Contract. If asbestos is found to exist in any of the materials, products, items, or equipment provided as part of this Contract, the Contractor shall be financially responsible for all costs resulting from removal in accordance with an Owner approved method and replacement of an asbestos free condition to finished drawings and specifications. The financial responsibility of the Contractor shall not terminate with the end of the surety maintenance bond period but shall continue through the life of the facility.

30. IOWA HAZARDOUS CHEMICAL RISKS RIGHT-TO-KNOW LAW

30.1 Owner's responsibility:

30.1.1 Owner shall provide to the Contractor a list of known hazardous chemicals within the project site to which their employees may be exposed and suggestions for appropriate protective measures.

30.2 Contractor's responsibility:

30.2.1 Contractor shall inform his/her employees of the Iowa Hazardous Chemical Risks Right-to-Know Law.

30.2.2 Contractor shall provide to the Owner a list of known hazardous chemicals that they anticipate will be used on site as well as all pertinent information relating to employee protection. Contractor's Material Safety Data Sheets (MSDS) shall be available to Owner upon request.

31. TAXES

31.1 All sales of construction and building materials to contractors and subcontractors for use in the building, erection, alteration or repair of structures, highways, roads, streets, and other public works owned and used by the Owner are taxable. Contractor labor, however, is tax-exempt.

31.2 All books and records pertaining to the Project that will allow the accurate determination of any tax due must be retained and be kept available for inspection by IMU for three (3) years after the completion of the Project.

31.3 All applicable taxes are to be paid by Contractor and are to be included in appropriate bid items; except that, the Contractor shall not be reimbursed for any State or other sales or use taxes incurred as a result of failure to obtain an exemption certificate prior to IMU's issuance of the Notice to Proceed.

32. SAFETY

32.1 Occupational Safety and Health Administration of the u>S. Department of Labor (OSHA) has certain requirements pertaining to protection of workers when working with hazardous chemicals, when excavation is being performed, or together work to be performed under this Contract. It is pointed out that it is fully the Contractor's responsibility to comply with these requirements and Indianola Municipal Utilities will not accept any additional charges for this compliance or any responsibilities for non-compliance by the Contractor.

Part III – Special Conditions

FIBER TO THE HOME
INDIANOLA MUNICIPAL UTILITIES
INDIANOLA, IOWA

1. INTENT

1.1 To supplement the provisions of the GENERAL CONDITIONS by outlining special conditions applicable to project.

2. LOCATION

2.1 Work is located in public right-of-way and easements across private and City owned properties in the City of Indianola, Iowa.

3. RIGHT-OF-WAY

3.1 Owner will provide easements for construction on private lands.

3.2 Contractor will be provided list of construction easement widths.

3.3 Confine movements of equipment and personnel, storage of materials, excavation, spoil banks, and all other construction operations within the rights-of-way provided.

3.4 Contractor will be held liable by City and adjacent property owners for damages outside rights-of-way and easements, failure of Engineer to warn Contractor about incidence of trespassing does not relieve liability.

4. ORDER OF CONSTRUCTION

4.1 Provide Engineer with proposed schedule of construction showing dates of starting and completing various portions of work.

4.2 Coordinate work with Owner and Engineer to assure orderly and expeditious progress of the work.

4.3 Contractor shall establish schedule of working hours for construction, subject to approval of Engineer.

4.4 Schedule construction to minimize use of street barricades and detours: clean up each portion of work as it is completed; schedule work to allow vehicular access for residents within 1 block of any closed street due to construction.

5. INTERRUPTIONS TO SERVICE

5.1 Existing utilities shall remain in substantially continuous operation during construction.

6. SERVICE FACILITIES

6.1 Water, electricity, compressed air, and other services shall be furnished by Contractor to meet his own requirements.

7. CONSTRUCTION FACILITIES BY CONTRACTOR

7.1 Provide suitable storage buildings or warehouse necessary for proper storage of materials and equipment. No storage will be available at any IMU facility.

7.2 Provide telephone at which Contractor can be reached by Owner or Engineer at all times during the working day; provide liaison between telephone and construction personnel for expeditious handling of messages.

7.2.1 Provide Owner and Engineer with at least 2 telephone numbers where Contractor's representative can be reached evenings, weekends, and holidays in event of emergency.

7.3 Location of all construction facilities, including project construction plant and yard, subject to approval by Engineer; remove all construction facilities upon completion of work.

7.4 Provide and maintain suitable sanitary facilities for construction personnel for duration of work; remove upon completion of work.

7.5 Provide fence, barricades, and/or watchmen to prevent access of unauthorized persons to site where work is in progress.

8. INSURANCE BY CONTRACTOR

8.1 Provide and maintain insurance throughout construction period in the following minimum amounts:

8.1.1 Workmen's compensation and occupational disease insurance in accordance with the laws of the State of Iowa covering all employees who perform any obligations assumed under the contract.

8.1.2 Public liability and property damage liability insurance covering all operations under the contract; limits of bodily injury or death not less than $1,000,000 for one person and $1,000,000 for each accident; for property damage, not less than $500,000 for each accident and $500,000 aggregate for accidents during the policy period.

8.1.3 Automobile liability insurance on all self-propelled vehicles used in connection with the contract, whether owned, non-owned, or hired; public liability limits of not less than $500,000 for one person and $1,000,000 for each accident; property damage limit of $500,000 for each accident.

8.1.4 Professional liability insurance covering Contractor for $1,000,000 covering all professional decisions and installation under the contract.

8.1.5 Umbrella liability (applying directly in excess above liability coverages); $1,000,000 combined single limit; $1,000,000 aggregate.

8.1.5 Name the Indianola Municipal Utilities as an additional insured under all policies.

8.2 Owner reserves right to approve insurance company.

8.3 Owner shall have right at any time to require public liability insurance and property damage liability insurance greater than required in above paragraphs. Additional premiums payable solely as result of such additional insurance shall be added to bid price.

8.4 Furnish certificates of insurance to Engineer made in favor of Owner showing compliance with foregoing requirements.

8.5 Notification in event of liability or damage: upon the occurrence of any event, the liability for which is herein assumed, the Contractor agrees to forthwith notify the Owner, in writing, such happening, which notice shall forthwith give the details as to the happening, the cause as far as can be ascertained, the estimate of loss or damage done, the names of witnesses, if any, and stating the amount of any claim.

9. CONTRACTOR'S RESPONSIBILITY

9.1 There shall be no liability upon public officials, Engineer, or his authorized assistants, either personally or as an official of the Owner, it being understood that in such matters he acts as an agent and representative of the Owner in carrying out any of the provisions of the contract or in exercising any power or authority granted him thereby.

9.2.1 The Contractor agrees to indemnify and hold harmless the Owner, the Project Manager, and their officers, employees, consultants, agents and insurers, from and against all liability, claims, and demands, on account of injury, loss, or damage, including without limitation claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, or any other loss of any kind whatsoever, which arise out of or are in any manner connected with the Contract, if such injury, loss, or damage is caused in whole or in part by, or is claimed to be caused in whole or in part by, the act, omission, error, professional error, mistake, negligence, or other fault of the Contractor, any Subcontractor of the Contractor, or any officer, employee, representative, or agent of the Contractor or of any Subcontractor, or which arise out of any workers' compensation claim of any employee of the Contractor or of any employee of any Subcontractor. The Contractor agrees to investigate, handle, respond to, and to provide defense for and defend against, any such liability, claims or demands at the sole expense of the Contractor. The Contractor also agrees to bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not any such liability, claims, or demands alleged are groundless, false, or fraudulent.

9.2.2 In any and all claims against the Owner or Project Manager, or any of their respective consultants, agents, officers, directors or employees by any employee (or the survivor or personal representative of such employee) of the Contractor, any Subcontractor, any supplier to the Contractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 10.1 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor, or any such Subcontractor, supplier or other person or organization under workers' compensation acts, disability benefit acts or other employee benefit acts.

9.2.3 The indemnity set forth in this paragraph 10.1 shall also cover IMU's defense costs, in the event that IMU, in its sole discretion elects to provide its own defense. IMU retains the right to disapprove counsel, if any, selected by Contractor to fulfill the forgoing defense indemnity obligation, which right of disapproval shall not be unreasonably exercised. Insurance coverage requirements specified herein shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain at its own expense any additional insurance that it deems necessary for IMU's protection in the performance of the Construction Contract.

9.2.4 All representations, indemnifications, warranties and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in this paragraph 10.1, will survive final payment, completion and acceptance of the work and termination or completion of the Agreement.

9.3 In the event any provisions in the contract are violated by the Contractor or any of its subcontractors, the Owner may serve written notice upon the Contractor and its surety of their intention to terminate such contract. Such notice shall contain a statement of the reasons for such action and unless within 10 days after the serving of such notice upon the Contractor such violation shall cease and satisfactory arrangements for correcting be made, the contract shall, upon expiration of said 10 days cease and terminate.

9.3.1 In the event of such termination, the Owner shall immediately serve notice thereof upon the surety and Contractor and the surety shall have the right to take over and perform the contract, provided, however, that if the surety does not commence the performance thereof within 30 days, the Owner may take over the work and prosecute the same to completion by contract for the account and at the expenses of the Contractor and the Contractor and its surety shall be liable to the Owner for any excess cost occasioned the Owner thereby; in such event, the Owner may take possession of and utilize such materials and appliances as may be on the site of the project and necessary in completing the work.

9.4 If suit is brought by the Owner for the breech of any provisions of this contract, the Contractor agrees to pay all costs in connection with suit, including reasonable attorney fees, whether or not the suit proceeds to judgment.

10. CLAIMS AND DISPUTES

10.1 Claims must be made by written notice to the Project Manager. The responsibility to substantiate claims shall rest with the party making the claim.

11. ATTORNEYS FEES

11.1 In the event it becomes necessary for either party to bring an action against the other to enforce any provision of this Construction Contract, in addition to any other relief that may be granted, the prevailing party in such action shall be entitled to an award of its reasonable attorney fees as determined by the Court.

12. POSITION, LINE AND GRADE

12.1 Construct to lines and grades shown on plans or as specified hereinafter.

12.2 Contractor shall perform detailed survey and staking for location, elevation, and grade of construction.

12.3 Contractor shall provide, without extra compensation, all men and necessary tools to make all test holes and exploration, at any time, for purpose of determining location of existing structures beneath ground surface which might conflict with work of Contractor.

12.4 Contractor shall preserve all monuments, reference points, stakes and benchmarks set by Engineer. In case of destruction by Contractor's negligence or carelessness, he will be charged with resulting expense of replacement, and responsibility for any mistakes or loss of time caused thereby.

12.5 These conditions supersede conflicting provisions of GENERAL CONDITIONS.

13. EMPLOYMENT PRACTICES

13.1 Contractor, or his subcontractors, shall not employ any person whose physical or mental condition is such that his employment will endanger the health and safety of himself or others employed on the project.

14. HISTORICAL/ARCHAEOLOGICAL FINDS

14.1 If, during course of construction, evidence of deposits of historical or archaeological interest is found, cease operations affecting find and notify Owner who shall notify Iowa Department of Natural Resources and Director and Historic Preservation Officer, State Historical Department, East 12th and Grand, Des Moines, Iowa 50319. No further disturbance of deposits shall ensue until notification by Owner that work may proceed. Owner will issue notice to proceed only after state official has surveyed find and made determination to Department of Natural Resources and Owner. Compensation to Contractor, if any, for lost time or changes in construction to avoid find, determined in accordance with changed conditions or change order provisions of specifications.

Part IV – General Requirements

1. FORM

1.1 Detailed specifications are in outline form and include incomplete sentences. Omission of words or phrases is intentional. Supply omitted words or phrases by inference.

2. INTENT

2.1 To set forth requirements of performance, type of equipment or structure desired, and standards of materials and construction.

2.2 To describe work set out in Contract Documents, unless otherwise specifically indicated.

2.3 To require performance of complete work in spite of omission of specific reference to any minor component parts.

2.4 To provide for new materials and equipment, unless otherwise indicated.

3. INTERPRETATION

3.1 Report errors or ambiguities in specifications to Engineer as soon as detected. Engineer will answer questions regarding and interpret intended meaning of specifications; his interpretation shall be accepted as final.

4. WORK INCLUDED

4.1 Furnish all materials, labor and equipment to construct 2017 Iowa Fiber to the Home Network Build as set out in the Solicitation for Bid.

5. STARTING AND COMPLETION TIME

5.1 Commence work within 10 calendar days after date set forth in written Notice to Proceed. Complete work within time set out in Solicitation for Bid.

6. INFORMATION FOR ENGINEER

6.1 After award of contract submit minimum 5 copies of following information and drawings for Engineer's review:

6.1.1 Manufacturer's specifications and catalog data for conduit, tracer wire, mule tape, strand, and pole hardware.

6.2 Within 15 days after award of contract, provide construction schedule showing dates of starting and completing various portions of work.

7. SHOP DRAWINGS

7.1 Intent of Engineer's review: to assist Contractor in interpreting plans and specifications.

7.2 Contractor's responsibility: to check drawings prior to submission for coordination and conformance with contract; do not submit without checking.

7.3 Engineer's review is only for general conformance with design concept of project and general compliance with information given in contract documents; any action shown is subject to requirements of plans and specifications; Contractor responsible for dimensions which must be confirmed and correlated at job site; fabrication processes and techniques of construction; coordination of work with that of all other trades and satisfactory performance of work.

7.4 Prior to submission of shop drawings and catalog data to Engineer: affix Contractor's stamp with signature of responsible person to show material submitted has been checked and approved by Contractor; shop drawings submitted without appropriate stamp and signature will be returned without Engineer's review.

8. PLANS AND SPECIFICATIONS

8.1 Engineer will furnish 1 hard-copy and 1 electronic file of plans and specifications after award of contract; Contractor shall compensate Engineer for printing costs for additional copies required.

8.2 Subcontractors and suppliers will be furnished copies only at request of Contractor: Engineer will be compensated for printing costs.

8.3 Provide 1 set of plans and specifications for each foreman or superintendent in charge of each crew on job.

9. STANDARDS AND CODES

9.1 Do work in accordance with best present-day installation and construction practices.

9.2 Conform to and test materials in accordance with applicable sections of latest revisions or tentative revisions of following codes and standards unless specifically noted to contrary:

9.2.1 American Association of State Highway and Transportation Officials (AASHTO).

9.2.2 Institute of Electrical and Electronics Engineers (IEEE).

9.2.3 National Electric Safety Code (NESC).

9.2.4 National Electric Code (NEC).

9.2.5 International Telecommunications Union (ITU).

9.2.6 Iowa Department of Transportation (IDOT); latest edition of standard

specifications and addenda.

9.2.7 Federal Specifications (FS).

9.2.8 Manual of Accident Prevention in Construction by Associated General Contractors of America, Inc., (AGC).

9.2.9 Occupational Safety and Health Act of 1970 (Public Law 91-596) (OSHA).

9.2.10 Iowa Occupational Safety and Health Act of 1972 (Chapter 88, Code of Iowa 2013) (IOSHA).

9.2.11 Current Iowa Manual on Uniform Traffic Control Devices (MUTCD).

9.2.12 National Institute for Occupational Safety and Health (NIOSH).

9.2.13 National Safety Council (NSC).

9.2.14 Standards and codes of the State of Iowa and applicable local standards, codes, and ordinances of the City of Indianola.

9.2.15 Other standards and codes which may be applicable to acceptable standards of the industry for equipment, materials, and installation under the contract.

10. RESPONSIBILITY OF CONTRACTOR

10.1 Protection of work.

10.2 Protection of all property from injury or loss resulting from his operations.

10.3 Replace or repair objects sustaining any such damage, injury, or loss to satisfaction of Owner and Engineer.

10.4 Without limiting GENERAL REQUIREMENTS of Contract Documents, protect flag poles, sidewalks, streets, pavements, fences, pipe, conduit, utilities, trees and shrubs and structures not shown for removal.

10.5 Cooperate with Owner, Engineer, and representative of utilities in locating underground utility lines and structures; incorrect, inaccurate or inadequate information concerning location of utilities or structures shall not relieve Contractor of responsibility for damage thereto caused by his operations.

10.6 Keep cleanup current with construction operations.

10.7 Comply with all federal, state and City of Indianola laws and ordinances.

11. BARRICADES, FENCING, AND LIGHTS

11.1 Erect and maintain barricades and lights and/or provide guards in conformance with Standard Road Plan Dwg. No. TC-252 of the Iowa Department of Transportation (IDOT) and current Manual of Uniform Traffic Control Devices (MUTCD), for protection and warning of pedestrians and vehicles; all
barricades, lights and/or guards at expense of Contractor.

11.2 Engineer will not allow work to proceed until all signs, barricades and lights are in place; requirements for type of signs and number of signs will be strictly enforced; improper signing during construction will constitute "improper work" and Engineer will cause Contractor to suspend work.

11.3 All signs, barricades, and other traffic control devices used on the project shall be furnished, installed, and maintained by Contractor; all traffic control devices shall be maintained in a state of good repair and shall be cleaned and washed periodically as needed.

11.4 Certain sections of public streets and sidewalks can be closed with the following restrictions:

11.4.1 Adequate protection shall be provided for pedestrians. If a section of sidewalk is closed, appropriate signing and fencing shall be utilized; signing and fencing shall remain in place until sidewalk is reopened for pedestrian use.

11.4.2 No portion of public street shall be reopened to use by vehicular traffic other than local traffic until excavated area has been restored to a hard surface condition or granular surfacing has been placed as directed by Engineer; provide sign for local traffic "Enter at Own Risk".

11.4.3 Notify City 24 hours prior to closing street.

12. FINAL REVIEW AND ACCEPTANCE

12.1 Notify Engineer when project is complete and ready for final review.

12.2 Owner will accept work and make final payment to Contractor:

12.2.1 When Engineer has certified that work of Contractor is complete and in conformance with the plans and specifications.

12.2.2 When Contractor has filed with Owner or Engineer documents called for in specifications.

13. PAYMENT

13.1 No separate payment will be made for work covered under this part of the specifications except as set forth below. Include all costs in appropriate unit prices.

14. DOCUMENTS AND SAMPLES AT THE SITE

14.1 The Contractor shall maintain at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to redline all changes and selections (all changes and selections to be approved by the Owner in advance) made during construction, and approved Shop Drawings, Product Data and Samples and similar required submittals. These shall be available to the Project Manager and shall be delivered to him for the Owner upon completion of the Work.

14.2 All documents and records required to be prepared or maintained by Contractor for eventual delivery to the Owner shall be delivered in hard copy and in a electronic/digital format acceptable to the Owner.

15. AS-BUILT DRAWINGS

15.1 During Engineer inspection visits as service areas or other work segments are complete, the Contractor shall furnish the following documents (unless directed otherwise by Owner) to the Project Manager for submittal to the Owner: redline drawings showing updated field changes and selections affecting the general construction, splicing, termination, and all other work, and indicating the Work as actually installed. These shall consist of carefully drawn markings on a set of hard copy prints of the Drawings. The Contractor shall maintain at the job site one (1) set of Drawings and indicate there on each field change as it occurs.

15.1.1 The Contractor shall furnish redline drawings for both the fiber and duct design drawings.

15.1.2 The Contractor shall furnish OTDR results as specified in Section 33 82 23.13.

15.2 The Project Engineer will provide Drawings identifying installation and design. Contractor will be responsible for recording via redline any deviation from the Drawings during construction (with approval from the Project Engineer) and notifying the Project Engineer for final approval and inclusion on the final As-Built Drawings (produced by the Project Engineer).

INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	NOTICE OF AWARD	
PROJECT:	**PROJECT NO.:**	**RESOLUTION NO.**
		APPROVAL DATE:
TO:		**DATE:**
DESCRIPTION OF WORK:		

Indianola Municipal Utilities ("IMU") has considered the Bid submitted by you for the above-described Work in
response to its Invitation for Bids dated ____________________ , 20______

You are hereby notified that your Bid has been accepted for items in the amount of $_______________ ("Contract Sum").

You are required by the IFB and Contract Documents to execute the Construction Contract and furnish the required Contractor's Performance, Payment, Maintenance and Warranty Bond and provide the required Certificates of Insurance and other insurance documentation as required by the General Conditions on or before
20 ____ , in accordance with the Contract Documents.

If you fail to execute said Contract, to furnish said Bond, or to file with required insurance documentation on or before the above stated date, said Municipal Utility will be entitled to consider your Bid as abandoned. IMU will be entitled to such other rights as may be granted by law.

Capitalized terms used herein and not otherwise defined shall have the definitions assigned in the Contract

Documents. You are required to return an acknowledged copy of this Notice of Award to IMU.

Dated this ____day of _____________________, 20

Indianola Municipal Utilities
County of Warren, State of Iowa

Project Manager ____________________________________

ACCEPTANCE OF NOTICE
Receipt of the above Notice of Award is hereby acknowledged:

CONTRACTOR ____________________________________
This _________day of ____________________ , 20_____
BY________________________________

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INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	NOTICE TO PROCEED	
PROJECT:	PROJECT NO.:	DATE:
		PAGE 1 OF 1
TO:		
DESCRIPTION OF WORK:		

You are hereby notified to commence Work in accordance with the Construction Contract dated
_____________________ ______ , 20 _________________________ , on , 20_, and you are to complete the Work within ___________________ consecutive calendar days after the date of this Notice to Proceed ("Contract Time"). Therefore, the date for completed Work is ______________________, 20

Capitalized terms used herein and not otherwise defined shall have the definitions assigned in the Contract Documents.

Indianola Municipal Utilities,
County of Warren, State of Iowa

Project Manager _______________________________________

ACCEPTANCE OF NOTICE
Receipt of the above Notice of Award is hereby acknowledged:

CONTRACTOR____

This __________ clay of_______________________ , 20___.

BY ____

INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	SHOP DRAWING TRANSMITTAL FORM	
PROJECT:	PROJECT NO.:	DATE:

TO: ______________________ Transmittal Number: ______________________
______________________ 1st submittal □ Resubmittal□
______________________ (Previous Transmittal #)

Description of Equipment:______________________ Manufacturer: ______________________
Data No. _______ Taken ______________

As stated in the Contract Documents, the undersigned Contractor's submission of these Shop Drawings or samples shall constitute a representation to Indianola Municipal Utilities that the Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalogue numbers and similar data or he assumes full responsibility for doing so, and that he has reviewed and coordinated each Shop Drawing or sample with the requirements of the Work, the General Conditions to Construction Contract, and the Contract Documents and he represents to IMU that item(s) described by these Shop Drawings do comply with the requirements of the Contract Documents. The undersigned Contractor certified that the Equipment included in this submittal complies with the latest requirements of the Occupational Health and Safety Act of 1970 including any standards or regulations established by the U.S. Secretary of Labor in administration of said Act.

Capitalized terms used herein and not otherwise defined shall have the definitions assigned in the Contract Documents.

____

(Authorized Signature of Contractor) (Firm Name) ______________________________

(Mailing Address) ______________________________

* *

(THIS SPACE FOR IMU, THROUGH ITS ENGINEER)

The above drawings are returned with action as designated above in accordance with the following legend:

A No Exception Taken
B Make Corrections Noted and Resubmit Corrected Copies
C Revise and Resubmit
D Rejected
E Submit Specified Item
By:______________________________
Date:

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INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	CHANGE ORDER	
PROJECT:	PROJECT NO.:	CHANGE ORDER NO.
		CONTRACT DATE:
TO:		**DATE:**

DESCRIPTION OF ORIGINAL WORK:
____
____

It is hereby mutually agreed that when this Change Order has been signed by the contracting parties, the following described changes shall be executed by the Contractor without changing the terms of the Contract, except as herein stipulated and agreed.

Contractor agrees to furnish all Materials and labor and to perform all Work required to complete the above described changes in accordance with the requirements for similar Work covered by the Contract, except as otherwise stipulated herein, for the following considerations:

CHANGE TO CONTRACT SUM	AMOUNT / DATED / AVG
Original CONTRACT SUM	$
Current CONTRACT SUM adjusted by Change Orders thru	$
The CONTRACT SUM due to this Change Order will be (Increased) (Decreased) (Unchanged) by	$
The new CONTRACT SUM including this Change Order will be	$
CHANGE TO CONTRACT TIME	
Current CONTRACT Completion Date	
CONTRACT TIME will be (Increased)(Decreased)(Unchanged) by this number of Calendar days	
The DATE for completion of all WORK (Amended Contract Time) will be	

<u>RECOMMENDED FOR ACCEPTANCE:</u>

PROJECT MANAGER/IMU ENGINEER:______________________

BY: _______________________ BY: _____________________ BY: ___________________
DATE: ____________________ DATE:___________________ DATE:_________________

<u>ACCEPTED:</u>

CONTRACTOR:______________________ INDIANOLA MUNICIPAL UTILITIES ______________________________________

BY: _______________________ BY: _____________________, Project Manager
DATE: ____________________ DATE:___________________

APPLICATION FOR PAYMENT 1 OF 2

INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	APPLICATION FOR PAYMENT	
PROJECT:	CITY PROJECT NO.:	PERIOD ENDING:
		ORIGINAL CONTRACT SUM: $
DATE:	APPLICATION NO.	CHANGE ORDER ADJUSTMENT: $
PAGE 1 OF 2		CURRENT CONTRACT SUM AMOUNT: $

CONTRACTOR:

SUMMARY OF CONTRACT	AMOUNT
1. Total accumulated Work on original Contract to date	$
2. Extra work by approved Change Order to date	$
3. Materials stored	$
4. Total accumulated work to date (Items I through 3)	$
5. Less: Retainage of five percent (5%) up to a maximum 5% of current Contract Sum	$
6. Net amount earned to date	$
7. Less: Amount of previous payment	$
BALANCE DUE THIS REQUEST	$

The undersigned Contractor certifies to the best of his knowledge, information and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents; that all amounts have been paid by him/her for Work for which previous Applications for Payment were issued and payments received from the City; and that current payment shown herein is now due.

____ BY: _____________________________________

DATE:________________________

CONTRACTOR

In accordance with the Contract Documents, based on on-site observation and the data comprising the above application, the Project Manager certifies that the Work has progressed to the point indicated; that to the best of his/her knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents; and that the Contractor is entitled to payment of the Amount Certified below.

AMOUNT APPROVED FOR PAYMENT ……………………….……………………………………$___________________________

____ ______________________

DATE:____

PROJECT MANAGER

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APPLICATION FOR PAYMENT 2 OF 2

INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	**Application for Payment (continuation sheet)**		
PROJECT:	**PROJECT NO.:**	**APPLICATION NO.:**	
		DATE:	**PAGE 2 OF 2**

TEM NO.	DESCRIPTION	BID ITEMS				WORK COMPLETED TO				
		ESTIMATED QUANTITY	UNITS	UNIT PRICE	EXTENDED	QUANTITY	UNITSPR	UNIT	EXTENDED AMOUNT	'3/0 COMP.

SUBTOTAL THIS SHEET		SUBTOTAL THIS SHEET		
GRAND TOTAL (LAST PAGE)		TOTAL COMPLETED TO DATE		

PARTIAL WAIVER OF LIEN

Project No.

To All Whom it May Concern:

WHEREAS, the undersigned has been employed by (A) ________________________________ to furnish labor and materials for (B) ____ work, under a contract (C) ____ for the improvement of the premises described as (D) ____ in the City of Indianola, County of Warren, State of Iowa, of which Indianola Municipal Utilities is the owner.

NOW, THEREFORE, this _______day of___________________________, 20 for and in consideration of the sum of (E) ______________________ Dollars paid simultaneously herewith, the receipt whereof is hereby acknowledged by the undersigned, the undersigned does hereby waive and release to the extent only of the aforesaid amount, any lien rights to, or claim of lien with respect to and on said above-described premises, the improvements thereon, and on the monies or other considerations due or to become due from IMU, by virtue of said contract, on account of labor, service, materials, fixtures, apparatus or machinery furnished by the undersigned to or for the above-described premises, but only to the extent of the payment aforesaid.

(F) _____________________________________
(Name of sole ownership, corporation or partnership)

(Affix corporate

SEAL here)

____
(Signature of Authorized Representative)

Title: _____________________________________

INSTRUCTIONS FOR PARTIAL WAIVER

(A) Name person or firm with whom you agreed to furnish either labor, or services, or materials, or both.
(B) Fill in nature and extent of work; strike the word labor or the word materials if not in your contract.
(C) If you have more than one contract on the same premises, describe the contract by number if available, date and extent of work.
(D) Furnish an accurate enough description of the improvement and location of the premises so that it can be distinguished from any other property.
(E) Amount shown should be the amount actually received on that date.
(F) If waiver is for a corporation, corporate name should be used, corporate seal affixed and title of officer signing waiver should be set forth; if waiver is for a partnership, the partnership name should be used, partner should sign and designate himself as partner.

FINAL WAIVER OF LIEN

Project No.

To All Whom it May Concern:

WHEREAS, the undersigned has been employed by (A) ___________________________________ to furnish labor and materials for (B) ____ work, under a contract (C) ____ for the improvement of the premises described as (D) ____ in the City of Indianola County of Warren, State of Iowa, of which Indianola Municipal Utilities is the owner.

NOW, THEREFORE, this _______day of____________________________, 20 for and in consideration of the sum of (E) _______________________ Dollars paid simultaneously herewith, the receipt whereof is hereby acknowledged by the undersigned, the undersigned does hereby waive and release to the extent only of the aforesaid amount, any lien rights to, or claim of lien with respect to and on said above-described premises, the improvements thereon, and on the monies or other considerations due or to become due from IMU, by virtue of said contract, on account of labor, service, materials, fixtures, apparatus or machinery furnished by the undersigned to or for the above-described premises, but only to the extent of the payment aforesaid.

(F) _____________________________________

(Name of sole ownership, corporation or partnership)

(Affix corporate

SEAL here)

____

(Signature of Authorized Representative)

Title:_______________________________________

INSTRUCTIONS FOR FINAL WAIVER

(A) Name person or form with whom you agreed to furnish either labor, or services, or materials, or both.

(B) Fill in nature and extent of work; strike the word labor or the word materials if not in your contract.

(C) If you have more than one contract on the same premises, describe the contract by number if available, date and extent of work.

(D) Furnish an accurate enough description of the improvement and location of the premises so that it can be distinguished from any other property.

(E) Amount shown should be the amount actually received on that date.

(F) If waiver is for a corporation, corporate name should be used, corporate seal affixed and title of officer signing waiver should be set forth; if waiver is for a partnership, the partnership name should be used, partner should sign and designate himself as partner.

	CERTIFICATE OF SUBSTANTIAL COMPLETION	
PROJECT:	CITY PROJECT NO.:	CONTRACT NO.:
		CONTRACT DATE:
SUBSTANTIAL COMPLETION DATE:	CONTRACTOR:	CONTRACT PRICE:
DATE ISSUED:	**DESCRIPTION OF PROJECT (OR SPECIFIED PART) COMPLETED:**	

DEFINITION OF SUBSTANTIAL COMPLETION

The date of Substantial Completion of the Contract or specified part of a Contract is the date when the construction is sufficiently complete for IMU, in accordance with the Contract Documents, including the General Conditions to the Construction Contract and the definition of "Substantial Completion" set forth therein, to make a finding that the Project (or specified part) can be utilized for the purposes for which it was intended. A List of Items to be completed or corrected ("Punch List") are attached hereto. The failure to include any items on said list does not alter the Contractor's responsibility to complete all Work in accordance with the Contract Documents.

Indianola Municipal Utilities

TO: ______________________________ **AND TO:** ______________________________

(CITY) **(CONTRACTOR)**

The Work performed under the Contract referenced above has been inspected by the Project Manager on the above-named project and/or the City Engineer for Indianola Municipal Utility and by the Contractor, and the Project or specified part thereof as indicated above, is hereby declared to be substantially complete. The date of Substantial Completion is the date upon which all guarantees and warranties begin, except as noted below. The Contractor and the City have agreed to the attached Punch List of items to be completed or corrected before Final Completion

______________________________ ______________________________ ________________

PROJECT MANAGER DATE

The Contractor accepts the above Certificate of Substantial Completion.

______________________________ ______________________________ ________________

CONTRACTOR AUTHORIZED REPRESENTATIVE DATE

INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	CERTIFICATE OF FINAL COMPLETION	
PROJECT:	**PROJECT NO.:**	CONTRACT NO.:
		CONTRACT DATE:
FINAL COMPLETION DATE:	**CONTRACTOR:**	CONTRACT PRICE:

DATE ISSUED:	**DESCRIPTION OF PROJECT COMPLETED:**

DEFINITION OF FINAL COMPLETION

The date of Final Completion of a Contract is the date when the construction or services are complete, in accordance with the Contract Documents including the General Conditions to the Construction Contract and the definition of "Final Completion" set forth therein, so that the Project or specified part of the project or Project Services can be utilized for the purposes for which it was intended and all Work as set forth on the Punch List issued upon Substantial Completion has been satisfactorily completed, notice has been published in accordance with law, and the timeframe provided in such notice has elapsed, and all releases of liens have been received to the satisfaction of IMU.

Indianola Municipal Utilities

TO: ______________________ **DATE OF SUBSTANTIAL COMPLETION:** ______________________

(CITY) **(CONTRACTOR)**

The Work performed under the Contract referenced above has been inspected by authorized representatives of Indianola Municipal Utilities and Contractor, and the Project (or specified part of the Project, as indicated above), is hereby declared to be completed. The date of Substantial Completion is the date upon which all guarantees and warranties begin, except as noted below.

ENGINEER ______________________ **DATE** __________

The CONTRACTOR accepts the above Certificate of Final Completion.

______________________ __________

CONTRACTOR **AUTHORIZED REPRESENTATIVE** **DATE**

MAINTENANCE & UTILITY RESPONSIBILITIES

IMU

Contractor

Final Payment in accordance with ATTACHED VOUCHERS AND FINAL PAYMENT FORM IS HEREBY AUTHORIZED.

Approval by:
IMU Engineer______________________ **Date** __________
IMU Manager______________________ **Date**
ENCLOSURES (identify and attach)

INDIANOLA MUNICIPAL UTILITIES IMU Electric • Communications • Water	CERTIFICATE OF PARTIAL ACCEPTANCE	
PROJECT:	CITY PROJECT NO.:	CONTRACT NO.:
PARTIAL ACCEPTANCE DATE:	CONTRACTOR:	

DATE ISSUED:	**DESCRIPTION OF PART OF PROJECT COMPLETED:**

PARTIAL ACCEPTANCE

Indianola Municipal Utilities (IMU) will issue this Certificate of Partial Acceptance upon application therefore by the Contractor and upon a finding by IMU that a unit or portion of the Project, such as a structure, utility service, or a section of road or pavement, has been satisfactorily completed in compliance with the Contract, relieving Contractor of further responsibility for that unit or portion of the Work. Partial acceptance shall in no way void or alter any terms or other obligations of ether party under the Contract.

Indianola Municipal Utilities

TO: ______________________ DATE OF PARTIAL ACCEPTANCE: ______________________

The Work performed under the Contract referenced above has been inspected by the undersigned authorized representatives of Indianola Municipal Utilities and. Contractor, and the specified part of the Project, (as indicated above) is hereby declared to be satisfactorily completed in compliance with the Contract.

ENGINEER DATE

The CONTRACTOR accepts the above **Certificate of Partial** Acceptance.

CONTRACTOR AUTHORIZED REPRESENTATIVE DATE

Part VI TECHNICAL SPECIFICATIONS

UNDERGROUND DUCTS AND RACEWAYS FOR COMMUNICATIONS SYSTEMS

PART 1- GENERAL

1. 01 DESCRIPTION

A. This specification addresses the requirements for the underground duct and raceway for the NORWALK TO INDIANOLA FIBER OPTIC LINK design.

B. This section covers overall product and implementation specifications for the underground duct and raceway.

C. The Contractor shall consider the specifications provided in this section in conjunction with the Contract Documents.

1.02 SECTION INCLUDES

A. Design Requirements

B. Materials

C. Installation

1.03 RELATED SECTIONS

A. Section 33 81 29 – Communications Underground Hand Holes

1.04 REFERENCES

A. NFPA 70 - National Electrical Code.

B. IEEE C2 - National Electric Safety Code.

1.05 SAFETY AND RESTRICTIONS

A. See specific elements within this document for safety and restrictions information. Contractors shall bear all responsibility and cost to locate existing underground utilities including, but not limited to, electricity, natural gas, domestic water, steam and condensate, chilled water, sewer, storm drainage, and telecommunications. Contractors shall have all underground utilities clearly marked prior to any excavation.

B. Contractors shall contact IMU immediately if unmarked utilities are discovered. Contractors shall stop all work in the area until the utility can be identified. Contractors may be required to recall the originally pre-approved locator to trace the utility to an identifiable point. Contractors shall contact IMU immediately if a utility is damaged in any way. Contractors shall stop all work in the area until directed by IMU.

C. Information from IMU on underground utility placement does not waive Contractors from confirming the presence and location of all underground utilities in the work area.
D. Contractors shall provide all necessary equipment to safely excavate and construct conduit/duct pathways. Contractor shall comply with all federal, state, and IMU regulations regarding working in this environment. Appropriate personal protective equipment is required and shall be the responsibility of the Contractors.

1.06 DESIGN REQUIREMENTS

A. Underground Pathways

1. The conduits and fittings shall be a 1.599" ID HDPE (1.5" nominal size) SDR 13.5 ASTM F 2160. The conduits shall be joined by heat fusion providing a permanent and watertight seal.
2. The backfill material may be material removed from the original excavation. All backfill materials shall be free from boulders, large rock, asphalt, concrete, bricks, wood blocks or roots, and other debris.
3. Hydro Seeding shall be used to replenish grass. Contractor is responsible for watering according to hydro-seeding requirements. Seeded area will need to be approved by IMU. After a 60-day period, IMU to issue final approval of seeded area.

C. Design for all materials to prevent erosion of seeded areas.

D. Direct buried

1. Only residential and multiple dwelling unit (non-business) drop pathways are allowed to be direct buried. Business drop pathways shall be in conduit. All other pathways shall be in conduit.

1.07 DELIVERY, STORAGE, AND PROTECTION

1. Store all materials above grade. Prevent water, dirt, and debris from entering conduits and tubing.

PART 2- PRODUCTS

1.08 MATERIALS

A. HDPE Conduit (Duct)

1. Manufacturers: Manufacturer shall be listed with the plastic pipe institute as meeting the recipe for mixing requirements of the resin manufacturer for the resin used to manufacture the pipe in this project.
   a. HDPE raceway for directional boring, plowing, and open trenching

2. Manufactured to ASTM F-2160-10 for HDPE Conduit based on Controlled Outside diameter meeting the following requirements:

   a. Wall Construction: Smooth Interior, Smooth Exterior
   b. Color: Orange
   c. Material Size: HDPR SDR 13.5, Diameter as shown in the plan, is the inside diameter.

d. Density .941-.955 g/cc
e. Melt Index of less than .15-.4 g/10 minutes
f. Tensile Strength at yield, 3,000 – 4,000 psi per ASTM D790
g. Flex modulus – 110,000 – 160,000 psi
h. ESCR, F20 Condition C, > 192 Hours
i. Minimum Elongation at break shall be 400% when tested per ASTM D638
j. Joining shall be performed by thermal butt-fusion in accordance with the manufacturer's recommendations. Or with the use of watertight and airtight mechanical connectors such as E-Loc manufactured by ETCO Technologies or equal.

B. Conduit plugs
1. Conduit ends must be covered at all times to keep debris out.

C. Pull tape
1. 5/8" or larger wide polyester, full length of reel
   a. Manufacturers
      i. Terry-Durin
   b. Mule tape, 22 AWG, 1250 lbs minimum
      i. Other acceptable manufacturers offering equivalent products

D. Warning tape (for open trenches only)
1. High stretch polymer, orange tape, blank print
2. Marked "Optic Fiber" or "Communications"
3. Manufacturers
   a. Empire Level Mfg., 25-071, Orange FO Cable MegaStretch
   b. Other acceptable manufacturers offering equivalent products

E. Tracer Wire
1. Green, insulated wire
2. #12 THHN copper solid conductor

PART 3- EXECUTION

3. 1 INSTALLATION

A. Digging and Trenching

1. In general, underground pathways shall be at a minimal depth of 42" to the top of the pathway elements, where possible. Deviations from this specification must be pre-approved by IMU Personnel.
2. Digging and trenching shall be in accordance with codes and requirements established by all applicable local, state, and federal agencies and departments.
3. All trenching and digging shall be done in a neat and workmanlike manner. All methods of construction and details of workmanship shall be subject to the control and approval of IMU.
4. Contractors shall protect from direct damage during construction and damage resulting from construction all surrounding environments, including, but not limited to, existing roadways, sidewalks, curbing, trees and shrubs, open grass areas, and planting beds. Contractors shall use planking and ramps as needed to protect these areas.

5. Contractors shall restore, repair, rebuild, or replace any items including, but not limited to, adjacent property, existing fences, trees and shrubs, roadways and curbs, sidewalks, and surface utilities and parts damaged during construction. Damaged items shall restore, repair, rebuild, or replace to their original condition and to the satisfaction of IMU.
6. Contractors shall locate and stake all pathways and spaces to be installed. Contractors shall confirm with IMU and the project engineers all staked pathways and spaces. Contractors shall notify IMU of any discrepancies in the site plan and the existing conditions.
7. Contractors shall protect, support, and maintain all existing utilities in the work area as they are encountered during excavation.
8. Contractors shall provide traffic control, signage, plating, etc. as necessary to maintain the safe flow of vehicular traffic as deemed necessary by IMU. Contractors shall contact IMU for approval of any changes to normal flow of vehicular traffic in and around the construction area and to arrange to road closures, if necessary.
9. Contractors shall install erosion control measures as needed to minimize erosion and to prevent soil run-off from the construction area.
10. Contractors shall saw cut all paved area encountered during excavations. Cuts shall be neat and straight.
11. Contractors shall provide and install all necessary barriers to prevent unauthorized entry into the construction area. Contractors shall provide temporary walkways to divert pedestrian traffic safely around the construction area. All open excavations must be fenced off. Scare or warning tape not allowed.

B. Restoration

1. Contractors may backfill in stages, when necessary to complete trenching.
2. Contractors shall remove all remaining excavated material from the construction area and shall compact trench or excavation area.
3. Contractors shall remove any erosion control devices no longer needed, not including those in and around hydro seeded areas.

C. Conduit/Duct Pathways

1. Contractors shall store all conduits and fittings in a manner to prevent dirt, rain, and other debris from entering the conduits. All conduits and fittings shall be free from dirt, water, and debris before installation.
2. Contractors shall locate each duct bank as specified by this document and subsequent documentation provided by IMU.
3. Contractors shall core-drill to penetrate a building.
4. Contractors shall provide and install framing as necessary to prevent the penetration of concrete into the interior space of a structure. Contractors shall remove this framing when the concrete has properly set and after backfilling is complete.
5. Contractors shall install horizontal conduits ending in structures flush with the interior surface of the wall. Contractors shall install vertical conduits ending in entrance facilities such that they extend a minimum of 4" above the final floor. Contractors shall cut the conduits square with the conduit. Contractors shall install vertical/angled conduits ending in vaults and hand holes such that they extend a minimum of 4” above pea gravel.

D. Final Installation of New Pathway
   1. Contractors shall install Mule tape pull strings into all conduits.
   2. Contractors shall install a tracer wire in one of the conduits of a new pathway. In handholes and entrance facilities, the tracer wire shall be bonded to ground. The wire shall be clearly labeled with a stainless-steel stamped tag.
   3. In hand holes, the tracer wire shall loop up to the neck such that it can be reached without entering the hole. The wire shall be securely anchored along the neck, ceiling, and wall.
   4. Contractors shall install duct plugs at both ends of all conduits.

E. Direct-buried Pathways
   1. Direct-buried pathways shall not be used for permanent distribution installations. Direct-buried pathways shall be used for drops, unless otherwise noted in Contract Documents.

UTILITY DIRECTIONAL BORING AND PLOWING

PART 1 – GENERAL

1.01 DESCRIPTION

A. This specification addresses the requirements for the Utility Directional Boring and Plowing for the Indianola Municipal Utilities Norwalk to Indianola Fiber Optic Link design.

B. This section covers overall product and implementation specifications for Utility Directional Boring and Plowing.

C. The Contractor shall consider the specifications provided in this section in conjunction with the Contract Documents.

1.02 SECTION INCLUDES

A. Contractor Submittals
B. Protection of Underground Facilities
C. Scope of Work
D. General

1.03 RELATED SECTIONS

A. Underground Ducts and Raceways for Communications Systems
B. Communications Underground Handholes

1.04 UTILITY DIRECTIONAL BORING CONTRACTOR QUALIFICATIONS

A. See Section Invitation to Bid

1.05 CONTRACTOR SUBMITTALS

A. All submittals requiring engineer approval shall be submitted not less than three (3) days prior to commencing any utility directional boring activities. Submittals for conduit installation shall include but are not limited to the following:
   1. The fusion machine operator shall be certified. Proof of certification shall be provided as part of the submittal package and approved by Owner prior to mobilization on site.
   2. Overall boring schedule with the estimated start date.

3. List of equipment to be used for the boring including directional drills, guidance systems, and boring support equipment and general information about each piece of equipment.
4. Summary description of the boring procedures.
5. Composition of boring fluid(s) to be used including Material Safety Data Sheets (MSDSs).
6. Description of boring fluid solids control system.
7. Plan for minimization of excess boring fluids and the disposal of those fluids. Provide documentation on the proposed boring fluids disposal site that demonstrates that the site is approved by all relevant regulatory agencies and that the site owner has granted permission for the fluids disposal.
8. Proposed plan and profile of one pilot hole alignment.
9. Pulling load calculations for each installation demonstrating that the maximum specified pull loads on the pipe or conduit will not be exceeded.

1.06 PROTECTION OF UNDERGROUND FACILITIES

A. The contractor shall be responsible for locating any and all underground facilities regardless of engineer's previous efforts in this regard. Contractor shall be responsible for all losses and repairs to underground facilities resulting from boring operations. The contractor shall undertake the following steps prior to commencing boring operations in a location which might contain underground facilities.
1. Contact Iowa one call and all other utilities and project owners not covered by this service for the construction area.
2. Positively locate and stake all existing lines (including sewer and irrigation), cables, dog fences, or other underground facilities including exposing any facilities which are located within 5 feet of the designed drill path.
3. Modify boring practices and downhole assemblies to prevent damage to existing facilities.

1.07 NOTIFICATIONS

A. The contractor shall give IMU a daily update prior to the start of any directional boring.

1.08 SAFETY

A. It shall be the contractor's responsibility to see that the work is done in conformance with all applicable Federal, State, and local safety requirements.

1.09 SCOPE OF WORK

A. Work under this specification includes all labor, equipment and materials required for installation of pipe or conduit by utility directional boring or plowing. The utility directional boring will be completed in two phases. The first phase consists of boring a small diameter pilot hole along the designed directional path as shown on the plans. The second phase consists of enlarging the pilot hole to a diameter suitable for installation of the pipe or conduit, and then pulling the pipe or conduit through the enlarged hole.

B. The contractor shall be responsible for maintaining the specified line and grade within the specified deviation tolerances.

C. Contractor shall plow according to direction given in Contract Drawings. All plowing shall be done in accordance with industry standards.

PART 2 – PRODUCTS

2.01 GENERAL

A. All materials and equipment used in the boring systems shall be of high quality and shall be in good condition. Utility directional boring shall be performed in accordance with these specifications and in accordance with the latest edition of Utility Directional Boring Good Practices Guidelines as published by the HDD Consortium and as available from the North American Society for Trenchless Technology. Utility directional boring shall include all labor, equipment and consumables necessary to complete the work as shown on the plans.

B. Plow chute shall be such that the conduit passing thru the chute will not bind or be bent at a radius of less than 20 times the outside diameter of the conduit. The feed chute must have a removable gate for the purpose of inspection and the allow the conduit to be removed from or inserted into the feed chute at any intermediate point between splice locations. The conduit path inside the chute shall have low friction surfaces and be free of burrs and other sharp edges. The use of internal guide rollers is prohibited.

C. The plowing equipment shall be capable of extending the plow depth in order to maintain the required minimum depths under all terrain conditions.

D. The reel carrier shall be of adequate size and be configured so that the reel sizes used by the contractor can be safely handled.

E. Buried Cable Warning Devices: IMU employs 2 types of buried cable warning devices.

1. Steel Marker Post and Tubular Markers with and without test stations
2. Buried Cable Warning Tape to be placed in all open trench and plow portions of an installation.

PART 3 – EXECUTION

3.01 GENERAL

A. Unless otherwise provided, the contractor shall furnish and install all fittings, closure pieces, jointing materials and all appurtenances as shown and as required to provide a complete and workable installation. All fabrication and testing shall comply with the requirements listed herein.

B. The contractor shall carefully study the plans and specifications applicable to the work involved, notify the engineer of any irregularities or difficulties, and become familiar with the conditions, and difficulties involved with utility directional boring at the site of the work.

C. Failure on the part of the contractor to properly appraise the factors, conditions and difficulties involved in the performance of the work will not entitle the contractor to extra compensation of any kind, nor shall it relieve the contractor of the obligation of executing all details of the work as specified and planned.

3.02 WORK AREA

A. The available work area is limited to the area designated within the construction limits as shown on the plans and/or as shown on the easements at the directional boring entrance area and exit area.

B. The contractor will be responsible for constructing any required temporary work pad for directional boring in accordance with all applicable permits and local ordinances. The CONTRACTOR shall provide culverts, rock, and geotextile if shown on the plans, complete.

C. The contractor shall contain the boring fluid at all times and prevent the flow of boring fluid out of the construction limits.
D. If applicable to the project, the contractor shall limit its operations within the designated temporary construction easement and permanent easement areas as shown on the drawings and/or the respective easements at the entrance and exit locations and shall adhere to all conditions and requirements of the easements granted to the owner.

3.03 PILOT HOLE

A. The pilot hole shall be drilled along the path shown on the drawings. and to the tolerances listed below:
   1. Elevation at entrance point - as designed.
   2. Entrance point location - within 2-feet radius of design location.
B. During directional boring, the contractor shall survey the location of the pilot hole every 20 feet. Upon the completion of the pilot hole boring, the contractor shall provide a tabulation of coordinates, referenced to the drilled entry point or to another approved suitable point that can be used to create an accurate as-built plan and profile of the pilot hole. The contractor shall utilize a directional boring locating system to guide the location of the pilot hole and to document the final location of the pipe. The locating system shall be DigiTrak F5 Directional Boring Location System as manufactured by Digital Control, Inc., Kent, Washington, or approved equal.

3.04 REAM AND PULL BACK

A. Pre-reaming operations shall be conducted at the discretion of the contractor. All provisions of this specification relating to simultaneous reaming and pulling back operations shall also pertain to pre-reaming operations.
B. The maximum allowable pull load imposed on the HDPE pipe shall be calculated by the contractor and submitted to the engineer for review. The tensile stress in the pipe wall at the pull nose shall not exceed 1,100 psi for HDPE pipe. The contractor shall have accurate working gauges which register tensile force being used to pull the pipeline back through the reamed borehole. IMU shall be notified immediately if pulling loads exceed 75 percent of the maximum allowable load for the pipeline. All pulling loads shall be monitored and recorded.
C. A swivel shall be used to connect the pull section to the reaming assembly to minimize torsional stress imposed on the section.
D. The pull section shall be installed in the reamed hole in such a manner that the external pressures are minimized. Any damage to the pipe resulting from external pressure during installation shall be the responsibility of the contractor.
E. Buoyancy modification shall be used at the discretion of the contractor. Any buoyancy modification procedure proposed for use shall be submitted to the engineer for approval. No procedure shall be used which has not been reviewed and approved by the engineer. Buoyancy modifications will only be allowed using potable water. The contractor is responsible for any damage to the pull section resulting from buoyancy modifications.

3.05 TRACER WIRE (Optional – project dependent)

A. Tracer wire shall be a #12 solid conductor with green THHN insulation. Tracer wire is to be utilized for future locating purposes, routed inside the duct. The tracer wire shall be routed to the blind flanges at either end of the drilled installation to provide access to terminal ends of the wire. All locations of tracer wire intersections shall be connected to provide electrical continuity and bonded to ground. After installation, the tracer wire shall be continuous.

B. Leave slack in mainline tracer wire equivalent to a 3-feet tail at each end to facilitate splicing, connecting, and waterproofing. Additional tail may be required at locations designed to have marker posts with test station.

C. Test for continuity in the wire after all work has been completed on the test section. Perform intermediate testing after backfilling operations and prior to surface restoration work.

3.06 BURIED CABLE MARKER'S LOCATION AND NUMBERING

A. IMU standard cable markers will be placed at locations noted on the construction drawings and at locations described below. When cable is being placed in open trenches or conduits, cable markers, and properly marked signs will be positioned simultaneously with trench backfill. Upon conclusion of cable placement, cable markers will be placed along the cable route. Engineering judgment is to be exercised in the placement of the tubular marking. One tubular marker may suffice in an area where a handhole, bore or running line change may exist.

B. IMU will not place markers with the urban areas of the community. However, it requires placements of markers in rural segments.

C. IMU standard marking device posts will be placed at all locations described below:

1. Minimum 1000-foot intervals in rural areas maximum. This distance is also limited to the line of sight to the next marker.
2. Culverts
3. Each side of water and bridge crossings
4. Road crossings
5. Handhole/vault locations

D. Tubular marker post with test stations are to be used at all handhole and vault locations in rural areas to assist with possible locates.

3.07 BORING FLUIDS

A. The contractor is responsible for obtaining, transporting, and storing any water required for boring fluids.

B. The contractor shall maximize recirculation of boring fluid surface returns. The contractor shall provide solids control and fluid cleaning equipment of a configuration and capacity that can process surface returns and produce boring fluid suitable for reuse. The engineer will review standards for solids control and cleaning equipment performance or for treatment of excess boring fluid and drilled spoil.

C. Disposal of excess boring fluids is the responsibility of the contractor and shall be conducted in compliance with all environmental requirements. Boring fluid disposal procedures proposed for use shall be submitted to the engineer. No procedure may be used which has not been approved by the engineer. Control of boring fluids on the site is very critical. Spills of boring fluids will not be allowed or permitted.

3.08 PLOW SLOTS

A. The slot made in the soil by plowing the conduit shall be closed immediately by driving a vehicle of sufficient weight over the plow slot to thoroughly compact the plow slot. Start and finish pits shall be excavated in advance of the start of plowing operations. All utilities that will be crossed by plowing shall be exposed in advance of the plowing operations to prevent damage. Care shall be exercised to prevent damage to previously installed conduits at start and end locations.

3.09 PLOWING PRECAUTIONS

A. The contractor shall be liable for all conduit damage and the subsequent repair of said damage.
B. The plowing tractor/prime mover shall be started slowly, and speed increased gradually after slack is removed from the conduit.
C. Changes in plow altitude and depth shall be changed gradually. Changes shall only be made while the prime mover is in motion.
D. In the event that the plow chute needs to be raised when the plow is not in motion, the contractor shall excavate the conduit to the rear of the chute and sufficient conduit slack shall be pulled so that the conduit is not kinked.
E. Only blades specifically designed for extreme forward rake angles may be used when plowing in with extreme forward raking.
F. When re-rigging the plow for offset plowing, the conduit shall be removed and rerouted throughout the chute to prevent kinking.
G. Abrupt changes in the plow path may require advance grading of the route. The contractor shall discuss these areas with the owner in advance and not proceed with written approval.
H. The plow shall not be operated in reverse while conduit is still in the chute.
I. The plow shall not be wobbled either in a vertical or horizontal manner to break through an obstruction.

COMMUNICATIONS UNDERGROUND HANDHOLES

PART 1- GENERAL

1.01 DESCRIPTION

A. This specification addresses the requirements for the Communications Vaults, Handholes, and Cabinets for the Norwalk to Indianola Fiber Optic Link Design.
B. This Contractor shall consider the specifications provided in this section in conjunction with the Contract Documents.

1.02 SECTION INCLUDES

A. Submittals
B. Materials
C. General

1.03 RELATED SECTIONS

A. Underground Ducts and Raceways for Communications Systems
B. Utility Directional Boring and Plowing

1.04 SUBMITTALS

A. Product cut-sheet

PART 2 - PRODUCTS

2.01 MATERIALS

A. Handholes
1. Rated ANSI Tier-5/AASHTO A8.

2. Contain Metal-Locatable marker for identification.
3. Handholes must be available in sizes and configurations according to Contract Documents to accommodate 50’ tails and 100’ coiled fiber storage and splice case.
4. Must be labeled “IMU Fiber Optic Cable”

PART 3 - EXECUTION

3.01 INSTALLATION

A. General
  1. Handholes shall be installed in locations according to the Contract Drawings.
  2. Contractor shall install 6” of pea gravel to cover the base.
  3. Contractor shall cut-off ducts within 4”-6” of pea gravel surface.

B. Environmental Provisions
  1. Excavating for hand holes shall be of sufficient depth and size to permit the installation of the unit.
  2. Contractor to backfill around the installed hand hole and place hydro seed and straw around the installation area to replenish damaged lawn.
  3. The hand holes shall be installed so they are flush to the ground line.
  4. Contractor shall compact the earth around the installed hand holes and vaults to prevent settling.

OPTICAL FIBER COMMUNICATIONS TRANSMISSION AND DISTRIBUTION CABLING

PART 1- GENERAL

1.01 DESCRIPTION

A. This specification section defines the optical fiber communications transmission and distribution cabling for the Norwalk to Indianola Fiber Optic Link design.
B. This section covers overall product and implementation specifications for Optical Fiber Communications Transmission and Distribution Cabling
C. The Contractor shall consider the specifications provided in this section in conjunction with the Contract Documents

1.02 SECTION INCLUDES

A. Submittals
B. Materials
C. General
D. Installation Preparation

1.03 RELATED SECTIONS

A. Optical Fiber Splicing and Terminations

1.04 SUMMARY

A. The fiber optic installation shall be in accordance with or exceed all minimal requirements of State codes, National codes and manufacturer specifications as applicable. Construction techniques shall conform to the following in order of precedence. (1) These standards and specifications; (2) Cable manufacturer; (3) accepted industry practices.

B. The contractor shall furnish and install all necessary miscellaneous equipment to make a complete and operating system.

1.05 APPLICABLE STANDARDS

A. Materials and equipment supplied as part of the fiber optic system shall comply with:

1. ITU-T G.657.B3
2. ITU-T G.652.D
3. NESC Section 230F, Overhead Clearances
4. REA Specifications for Filled Fiber Optic Cables
5. EIA-STD-RS-455 Standard Test Procedures for Fiber Optic Fibers, Cables, Transducers, Connecting and Terminating Devices
6. MIL-STD-202 Test Methods for Electronic and Electrical Component Parts
7. MIL-STD-454 Standard General Requirements for Electronic Equipment
8. MIL-STD-810 Environmental Test Methods and Engineering Guidelines
9. EIA/TIA-598 Tube and Fiber Color Code
10. EIA-568-A Fiber Optic Cable Testing Procedures
11. NFPA-70-1993 National Electrical Code Article 770, Optical Fiber Cable

1.06 SECTION INCLUDES

A. Methods and materials for installing

B. Fiber Optic Cable

1.07 SUBMITTALS

A. Installation Plan

B. Manufacturer Data Sheets

PART 2- PRODUCTS

2.01 MATERIALS

A. Materials and equipment shall be the standard products of a manufacturer regularly engaged in the manufacturing of products used for outdoor fiber optic system installations. All materials and equipment furnished shall be new, of first quality, of latest design and be completely free from defects in material and poor workmanship. All like pieces of equipment shall be of the same type and manufacturer to assure uniformity, interchangeability of components, single responsibility, and most satisfactory service.

B. Each major component of equipment shall have the manufacturer's name, address, type or style, model or serial number and catalog number on a plate secured to the equipment.

C. Fiber Optic Cable General Specifications

1. General Cable Characteristics
   a. Loose tube construction
   b. Single armor, single jacket
   c. Moisture inhibitor or water blocking tape
   d. Fiber counts contained in sheath will range from 12 to 288
   e. Standard single mode fiber with the following characteristics:

PARAMETERS	VALUE
Mode	Single
Type	Step Index
Core diameter	8.3 µm (nominal)
Cladding diameter	125 µm ±1.0 µm
Core to Cladding Offset	≤ 0.6 µm
Coating Diameter	245 µm ±10 µm
Cladding Non-circularity defined as: [1-(min. cladding dia ÷max. cladding dia.)]x100	≤ 1.0%
Proof/Tensile Test	100 kpsi, min.
Attenuation @ 1,310 nm	≤ 0.35 dB/km
Attenuation @ 1,410 nm	≤ 0.30 dB/km
Attenuation @ 1,550 nm	≤ 0.25 dB/km
Attenuation at the Water Peak	≤ 2.1 dB/km @ 1383 ±3nm
Chromatic Dispersion:	
Zero Dispersion Wavelength	1301.5 to 1321.5 nm
Zero Dispersion Slope at zero dispersion wavelength	≤ 0.092 ps/(nm^2*km)
Maximum Dispersion:	3.3 ps/(nm*km) for 1285 - 1330 nm <18 ps/(nm*km) for 1550 nm
Cut-Off Wavelength	<1260 nm
Mode Field Diameter (Petermann II)	9.3 ±0.5 µm at 1310 nm 10.5 ±1.0 µm at 1550 nm

D. Upon arrival of the fiber cable reels to the job site from the manufacturer, all reel and cable data shall be removed from the reels. The Contractor shall provide a bi-directional OTDR shot of each fiber to determine that all fibers match reel data and that no fibers were damaged during transport. The Contractor shall provide all reel data and OTDR traces, as well as packing lists to the Owner or their authorized representative for review and approval prior to cable installation.

PART 3 - EXECUTION

3.01 GENERAL

A. The handling of fiber optic cables shall comply with the specifications of the manufacturer. Maximum tensile forces applied to the cable as well as minimum bend radius specifications are typical requirements common to all fiber optic cables.
B. Contractor shall install fiber optic cable in the conduit system as specified on the drawings, and in accordance with Owner’s specifications and the manufacturer’s recommendations. Each reel of fiber optic cable shall be tested at the factory. The Contractor may at their discretion, reel test the fiber prior to installation. Contractor assumes responsibility of the fiber cable upon receipt until acceptance by Owner.
C. Contractor shall record fiber sheath cable footage markings.
D. Contractor shall leave fifty feet (50’) tail and 100’ coil of cable slack in distribution point handholes that will be utilized for splicing. All cable slack shall be neatly coiled into handhole J-hooks and secured with black cable ties.
E. The cable shall be identified in each distribution point and access points utilizing cable tags. Contractor shall label cable with a stainless steel and copper stamped tag. Labels

shall include the cable name and any requested Owner information.

F. When utilizing existing conduit in the area or Owner's existing backbone conduit system the Contractor shall account for the cleaning and the fishing of conduits before installing fiber optic cables in the these conduits, if the existing conduit is empty.

G. New and existing empty conduit shall be fished a few days before the installation of the cable in order to minimize obstacles in the pulling of the cable.

H. The Contractor shall lubricate, with product specifically designed to lubricate cables with polyethylene exterior sheaths, all new fiber optic cables, which may be pulled through a fabric innerduct, in order to minimize the pulling force applied to the cable during its installation. Generally, a quantity of 50 ounces per 1600 feet of cable is necessary. All lubricant or leak detection liquid shall be non-flammable and non-corrosive. The maximum pulling force at the pulling handle shall be 2.6 kilo-Newton and 2 kilo-Newton per each 300 feet, on the sheath of the cable. In order to minimize the risk of pulling too hard, the equipment shall never be set at a level higher than which corresponds with the maximum tolerance for the cable.

I. Contactor shall avoid bends of small radii and twists that may damage the fiber optic cable. Contractor shall not bend cable in a radius less than twenty (20) times the outside diameter of the cable. Contractor shall use pulleys, sheaves, radius wheels, or other devices to meet this requirement.

J. Contractor shall pull the cable at the recommended pounds of dynamic tension by manufacturer. Contractor shall use safeguards such as adjustable slip clutch capstan winches or pulling dynamometers. Contractor shall be responsible for proving that all safeguards have been calibrated and demonstrate their functionality.

K. Contractor shall utilize cable lubrication to reduce pulling tension.

L. The Contractor shall handle all cables with the necessary precaution to prevent any damage to the sheath of the cable while storing, moving, pulling or installing the cable. Any cable which is damaged by the Contractor will need to be replaced by the Contractor at their expense. The manufacturer of fiber optic cables shall supply with the cable reel a paper copy of the test results performed at the factory on the cable.

M. The Contractor shall respect the minimum bend radius of the fiber optic cable specified by the manufacturer. The minimum bend radius is generally never smaller than ten (10) times the diameter of the cable. Some manufacturers of certain kinds of fiber optic cables require minimum bend radiuses of 16 to 24 times the diameter of the cable. The Contractor shall respect, at all turns in the cable path, the minimum bend radius that the cable tolerates while it is being pulled, and the final bend radius when the cable is permanently set in place.

N. The Contractor shall never apply a pulling force on the cable, which may exceed the maximal pulling force specifications of the manufacturer.

O. Any and all damages to the cable caused by or discovered by Contractor shall be immediately reported to the Owner's field representative. Upon notification, Owner will instruct the Contractor as to action necessary for cable repair or replacement.

P. Contractor shall dispose of all reels in an appropriate manner. Any unused cable shall be returned to Owner or as directed by the Owner's field representative. Contractor shall properly dispose of any cable determined to be "unusable" by an Owners field representative.

OPTICAL FIBER SPLICING AND TERMINATIONS

PART 1 – GENERAL

1.01 DESCRIPTION

A. This section addresses the requirements for the Optical Fiber Splicing and Terminations for the Norwalk to Indianola Fiber Optic Link design.
B. This section covers the overall product and implementation specifications for Optical Fiber Splicing and Terminations
C. The Contractor shall consider the specifications provided in this section in conjunction with the Contract Documents.

1.02 SECTION INCLUDES

A. Applicable Standards
B. Submittals
C. Quality Assurance
D. Materials
E. Installation

1.03 RELATED SECTIONS

A. Optical Fiber Transmission and Distribution Cabling

1.04 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.05 SUMMARY

A. Provides a standard for the splicing and termination of fiber optic cable for IMU. The specification considers that the contractor and work crews are experienced in general cable and fiber strand preparation, familiar with the installation of fiber splice closures, tray management, fusion splicing, and final fiber path connectivity testing. All practices shall be completed in the manner typical of industry standards and all work and facilities will be subject to final inspection and acceptance by the IMU project representative.

The contractor shall furnish and install all necessary equipment to make a complete and operating system.

B. Section Includes
   1. Specifications for materials
   2. Methods for splicing, termination, and testing of fiber optic cable

1.06 APPLICABLE STANDARDS

A. The fiber optic cable installation shall be in accordance with or exceed all minimal requirements of State codes, National codes and manufacturer codes as applicable. Construction techniques shall conform to the following in order of precedence: 1) Manufacturer; 2) accepted industry practices, 3) these standards and specifications. Materials and equipment supplied as part of the fiber optic system shall comply with:
   1. ITU-T G.657.B3
   2. ITU-T G.652.D
   3. REA Specifications for Filled Fiber Optic Cables

4. EIA-STD-RS-455 Standard Test Procedures for Fiber Optic Fibers, Cables, Transducers, Connecting and Terminating Devices
5. MIL-STD-202 Test Methods for Electronic and Electrical Component Parts
6. MIL-STD-454 Standard General Requirements for Electronic Equipment
7. MIL-STD-810 Environmental Test Methods and Engineering Guidelines
8. EIA/TIA-598 Tube and Fiber Color Code
9. EIA-568-A Fiber Optic Cable Testing Procedures
10. NFPA-70-1993 National Electrical Code Article 770, Optical Fiber Cable

1.07 SUBMITTALS

A. Written installation practices and procedures for projects of this type, including practices used to safeguard materials from damage during installation
B. Manufacturer Data Sheets for all materials used during construction of this project.
C. Record Drawings: Identify and accurately records the splice information including fiber management information, testing reports, etc.

1.08 QUALITY ASSURANCE

A. Pre-installation Conference: Conduct conference at Project site prior to the start of any fiber splicing or termination
   1. Qualifications:
      a. Any project requiring the opening of the fiber optic cable jacket, installation of fiber optic connectors, splicing fibers, or the testing of any fiber optic cable, drop cable, or patch cords shall have at least one supervising fiber optic technician (SFOT) assigned to it. Supervising fiber optic technicians shall meet the following minimum requirements.
      b. The SFOT shall be able to document a minimum of five years of work experience where the splicing, termination, and testing of fiber optic cable with an optical time domain reflectometer (OTDR) and power meter was a primary job responsibility.
      c. The SFOT shall be on the job site supervising other technicians full-time for of all of the splicing, termination and testing of the fiber optic cable.
      d. The SFOT shall also be present to review the entire installation before completion.
      e. Technicians, other than the SFOT, performing fiber optic work such as cable cleaning, splicing, connectorizing, and terminations shall have successfully completed a minimum of one 16-hour fiber optic cable installation course from a major cable manufacturer or approved independent school or two years relevant on-the-job experience. Contractor shall provide IMU documentation stating such.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Fiber Optic Splice Closures
   1. Should consist of a single ended design and support both mid-sheath and Butt cable splicing
   2. Hinged trays for accessibility
   3. Preferred to have the least amount of mechanical parts (tape, B sealant, shrink tube, etc.) to minimize human error and prevent water migration into splice enclosure.
   4. Available in sizes to accommodate ribbon fiber counts from 12 to 864.
   5. External grounding lugs for locate and grounding wires
   6. Ability to be pressure tested for leaks.

7. Multiple entry ports.
8. Easily re-enterable for future expansion. This is for adding cables or splicing additional fibers at a later date.

B. Grounding and Bonding
1. Grounding/bonding shall occur at every splice location and building entrance and at other locations which may be called out on the construction detail drawings.
2. The ground rod shall be five-eighth inch (5/8") diameter and eight feet (8') long copper clad and installed to leave six inches (6") exposed inside the handhole.
3. A 5/8 inch acorn, bronze clamp shall be used to affix ground wire to ground rod. Contractor shall install a #6 AWG jacketed solid copper wire from the ground rod to the splice closure ground lug.

PART 3- EXECUTION

3.01 INSTALLATION

A. The guidelines for terminating and testing the fiber optic network connectivity. Contractors will have successfully installed the specified materials. Manufacturer's installation specifications shall be followed.
B. Contractor shall install fiber optic cable and splice enclosures in the conduit system or building terminations as specified on the drawings, and in accordance with the manufacturer's recommendations. Contractor assumes responsibility of the fiber cable upon receipt until acceptance by Owner.
C. Any and all damages to the cable or material caused by or discovered by Contractor shall be immediately reported to the Owner's field representative. Upon notification, Owner will instruct the Contractor as to action necessary for cable repair or replacement.
D. Contractor shall use safety measures to protect workers from traffic along roads.
E. Contractor shall dispose of all waste in an appropriate manner. Any unused cable or material shall be returned to Owner or as directed by the Owner's field representative. Contractor shall properly dispose of any cable or material determined to be "unusable" by an Owners field representative.
F. Install fiber splice enclosures in locations specified in the design drawings. The installation of the enclosures should be in accordance with the specifications of the manufacturer.
G. Fiber Optic Cable Preparation
1. Splice Enclosure Cable Dressing
a. Cable end and mid-sheath entry preparation should be performed according to splice enclosure manufacturer installation specification
2. Butt Splice Preparation
a. The manufacturer's installation instructions are made part of this specification by reference; they will strictly be adhered to. Any variances to the manufacturer's installation instructions must be pre-approved by the IMU supervisor.
b. All enclosures will be clean from dirt, cable grease, buffer tube scraps, sheath sealant, compounds, or any other foreign objects. Good housekeeping rules apply.
c. Strength members will be fastened down tightly. This includes Kevlar wrap if it exists. Any coating on strength members must be removed prior to securing it under the clamp.

d. Tighten all nuts & bolts.
e. Clean and organize the Buffer Tubes or Ribbons within the enclosure according to the manufacturer's instructions. Approved cleaning materials are Isopropyl Alcohol (99% pure), D-Gel, or Fiber Clean. Do not use kerosene, gasoline, acetone, or any other chemicals not previously stated. Refer to Figure 1 Figure 2 for examples of how to organize Buffer Tubes within the enclosure.

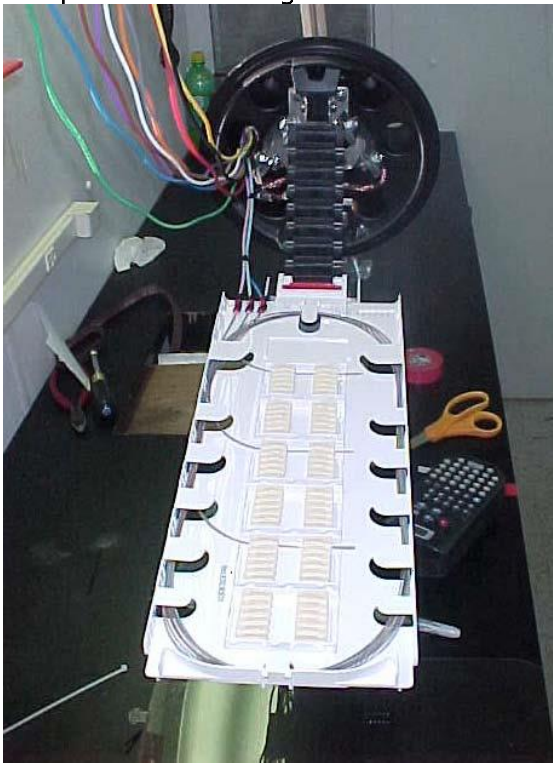

Figure 1: Butt Splice Enclosure; Typical Preparation

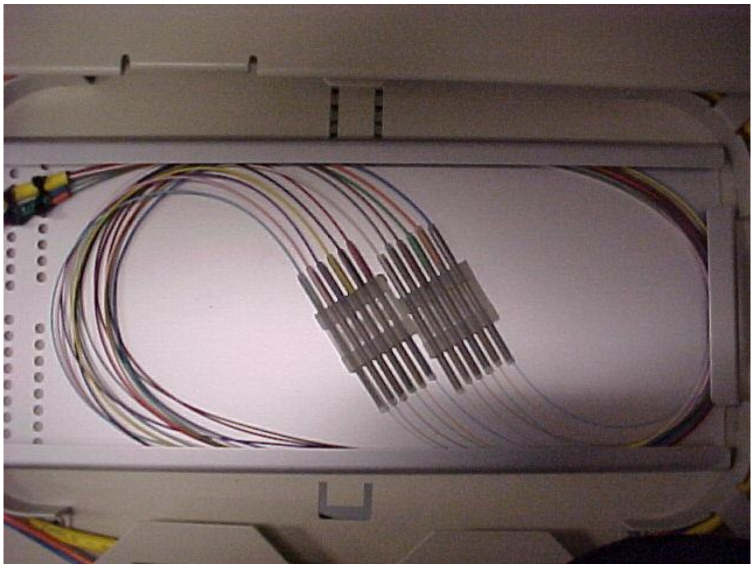

Figure 2: Mid-Sheath Preparations for Splice Enclosures

f. Secure splice trays within the enclosure using the manufacturer's supplied materials.
g. If the cable is armored, place a ground according to the specifications for cable grounding.

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h. Tubes that enter a tray must be protected from the tie wraps. Generally use several wraps of protective tape, or a method approved by the IMU Supervisor.
i. Dress and organize fiber into a splice tray neatly. Order the fiber tubes according to the splice numbers from low to high.
j. Completely shrink fusion splice protectors and secure the fiber in the splice chip properly, so that whether the protective bar or fiber faces up, it will be uniform. All exposed glass must be centered properly in the heat shrink.
k. Fibers that are not to be spliced (but are in the splice tray), should be dressed last into the tray, taped down, and labeled as to which tube/cable the fiber is from. This is done for future accessibility.
l. Dispose of glass fragments properly.
m. The overall appearance of the splice enclosure must be clean and organized.
n. Failure to comply with any of the above items could result in the responsible party re-installing the enclosure at their expense.
o. A mid-sheath preparation will follow the same procedure as a butt splice preparation.
p. Place the reverse spiral wrap in the center of the loop. This is done not only for convenience, but also because some splice enclosures will not dress properly if done any other way.
q. Evenly coil and loosely tie wrap together the tubes not cut in a mid-sheath. Place the coil under the splice tray and secure it or place it in a storage basket (depending on type of splice closure).
r. The mid-sheathed tube should be dressed into a splice enclosure following the manufacturer's instructions.

Figure 3: Exposed Mid-Sheath Buffer Tubes

Figure 4: Reverse Spiral Wrap – Center of Exposed Buffer Tubes

H. Labeling

1. A label maker must be used for all labels. The Contractor will label the splice closure as follows:
2. Cables – Label the cables entering the enclosure with the following information:
   a. Direction of the cable
   b. Cable count
   c. Location being serviced, if applicable
3. Tubes – Label the tubes entering the tray with the following information:
   a. Direction of the cable
   b. Cable count

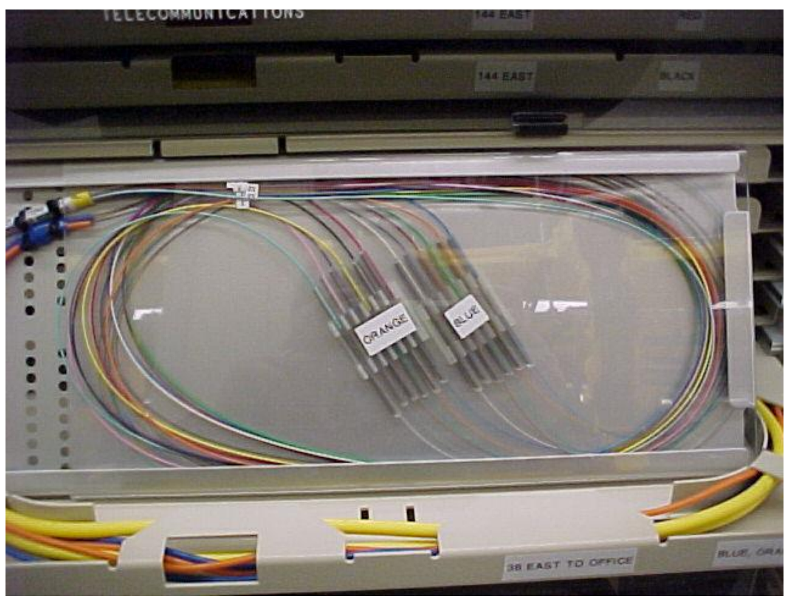

Figure 5: Splice Tray Labeling Example

4. Label the trays as follows:
   a. Buffer Tube Color
   b. Cable Count and Direction
   c. At the splice chip indicate buffer tube color and system ID, if applicable
5. Ground Wire – Label the ground wire (if applicable) for direction and cable count to identify which cable the ground lead is for.
6. Place a label in a visible location inside the enclosure that lists the date, and the name of the company and individual responsible for creating the splice.

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I. Fiber Optic Cable Splicing
   1. Strand splicing in accordance with splicing diagrams in Contract Documents
   2. All splices will be performed with an industry accepted fusion splicing machine
   3. The splicing standards shall be as follows:
      a. The objective loss value of the connector and its associated splice will be 0.50 dB or less.
      b. The objective for each fiber within a span shall be an average bi-directional loss of 0.15 dB or less for each splice. For example, if a given span has 10 splices, each fiber shall have a total bi-directional loss (due to the 10 splices) of 1.5 dB or less. Individual bi-directional loss values for each splice will be reviewed for high losses.
      c. The aforementioned standards are objectives, not the basis for acceptance. The acceptance standard for each fiber per span shall be calculated as follows:
         i. Span Loss = a(span distance in kilometers) = b(0.15 dB/splice + c(0.50 dB/connector) where:
            1. a = maximum fiber loss in dB per kilometer for the specific fiber type/manufacturers at 1310nm, 1490nm or 1550 nm
            2. b = number f splice locations for the span
            3. c = number of connectors for the span

J. Fiber Optic Cable Testing
   1. After splicing and end-to-end (PoP to MST or ONT) connectivity is achieved on the Dark Fibers, bi-directional span testing will be performed by the Contractor for each fiber segment, i.e. distribution port to splice and each splice point. These measurements will be made after all cable installation activities are complete for each segment. Once the bi-directional testing is achieved, if IMU believes that the criteria set forth herein are not met as a result of the splicing performed by Contractor at an Access Point, Contractor shall provide the OTDR tests for the entire Span to IMU in order to allow IMU to verify and if necessary, have Contractor perform re-splicing in order to correct the problem.
   2. Installed loss measurements at 1310nm, 1490nm, and 1550nm will be recorded using an industry accepted laser source and power meter. Continuity testing (checking for "frogging") will be done on all fibers concurrently.
   3. OTDR traces will be taken at 1310nm, 1490nm and 1550nm and splice loss measurements will be analyzed. G Nettest Laser Precision format will be used on all traces, unless another OTDR format is agreed to by IMU and Contractor
   4. The OTDR trace files should include the Operator Identification and date/time stamp.
   5. The Contractor is responsible for providing the software required to read the test results
   6. All test results shall be saved with the unit of measure in kilo-feet.
   7. All testing, power levels and OTDR traces will be conducted at 1310nm, 1490nm and 1550 nm.
   8. OTDR traces shall be saved in a standard file naming convention
      a. All fiber traces files should be stored in a Bell core GR-196 compliant format at the time of testing. The naming of the files will follow the fiber trace naming format listed below. *Note: Typically the Bell core GR-196 compliant format will be the ".SOR" format for most OTDRs. Refer to individual OTDR Users Manual for detailed instructions.*
      b. The fiber trace names will vary in character length depending upon the type, model and limitations of the OTDR used, but all must follow this general format:
         1. AAAXXXXXBBBYYYYY_CC_DDD
            i. AA = Terminal Panel

ii. XXXXX = Panel Terminal Number
iii. BBB = Far site location (SPL, ONT, or MST)
iv. YYYY = Far site Terminal Number
v. CC = two-number identifier for the wavelength (13, and 14 for 1310nm and 1490nm)
vi. DDD = three-number identifier for fiber number (i.e., 001, 002, 124)
vii. Example:TP13617MST09670_13_001.sor
viii. Example: For business TP416018SPL12451_13.001 (File detail will indicate SOR format)

2. If a damaged or faulty fiber is found during testing, the trace shall be identified in the file name by substituting the first character in the file name with an X.
   i. Example: XTP416018SPL12451_13_001.sor

3. Input all the applicable file data information into the OTDR during the testing process. The OTDR information fields may vary depending on manufacture and model of the test equipment used. (I.e. operator, origin, end location, cable identification, date, time, etc.)

9. One set of CDs with OTDR traces will be provided to IMU for each link to an Access Point. Power level results will be submitted on paper documentation. The output of both the OTDR traces and power level results will be recorded electronically as well
10. The splicing standards shall be as follows:
    a. The objective loss value of the connector and its associated splice will be 0.50 dB or less.
    b. The objective for each fiber within a span shall be an average bi-directional loss of 0.15 dB or less for each splice. For example, if a given span has 10 splices, each fiber shall have a total bi-directional loss (due to the 10 splices) of 1.5 dB or less. Individual bi-directional loss values for each splice will be reviewed for high losses.
    c. The aforementioned standards are objectives, not the basis for acceptance. The acceptance standard for each fiber per span shall be calculated as follows:
    d. Span Loss = a(span distance in kilometers) = b(0.15 dB/splice + c(0.50 dB/connector) where:
       1. a = maximum fiber loss in dB per kilometer for the specific fiber type/manufacturers at 1490nm or 1310 nm
       2. b = number f splice locations for the span
       3. c = number of connectors for the span
11. All connector splices will be protected with heat shrinks. Backbone splices may be stored in trays with bare fiber manifolds and RTV silicone protection. An industry accepted splice enclosure will be used on all splices

K. Environmental Provisions.
   1. All splicing must be conducted in a controlled environment.

Part VII – PLAN SET IMU FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY

Engineer's Estimate

Project: IMU Fiber Network Extension to Water Resource Recovery Facility

NewCom Technologies

Item No.	Description	Unit	Estimated Quantity	EACH [1]	Total Price [1]
1	Underground - Directional Drilled: Furnish & Install, 1.5" Conduit with mule tape	LF	7,860	$12.00	$94,320.00
2	Ground Rods and ground kits: Furnish and Install	EA	3	$75.00	$225.00
3	Fiber Marker Posts with Test Stations: Furnish and Install	EA	3	$175.00	$525.00
4	Fiber Marker Posts: Furnish and Install	EA	8	$80.00	$640.00
5	24x36x24 Hand Hole: Install Only	EA	12	$450.00	$5,400.00
6	13x24x24 Hand Hole: Install Only	EA	7	$400.00	$2,800.00
7 [2]	Armored Fiber Optic Cable Installation (72 count or 96 count): Install Only	LF	9,060	$0.80	$7,248.00
8 [2]	B Size Splice Cases with Trays Installation: Install Only	EA	2	$375.00	$750.00
9 [2]	Splicing and Testing per Fiber Strand	EA	84	$37.00	$3,108.00
Note [1]: Price includes state and local tax and freight Note (2), Alternate item pricing, as IMU may elect to perform these items with internal staff					
				Subtotal Bid Items 1-6	**$103,910.00**
				Subtotal Alternate Bid Items 7-9	**$11,106.00**
				Project Estimate:	**$115,016.00**

LICENSED PROFESSIONAL ENGINEER
BETHANY J. KEPHART
17120
IOWA

I hereby certiy that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Profesiona Engineer under the laws of the State of Iowa

Bethany Kephart 01/07/2022

(Signature) (Date)

Printed or typed name Bethany Kephart

License number 17120

My license renewal date is December 31, 2023

Pages or sheets covered by this seal:

Engineer's Estimate - One (1) Page

INDIANOLA MUNICIPAL UTILITIES

IMU

Electric • Communications • Water

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Public Hearing on the plans, specifications, form of contract and estimate of cost for the Fiber Extension to the Water Resource Recovery Facility Project.

Recommendation: The Chairperson will open and close the public hearing.

Attachments: None

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Resolution adopting the plans, specifications, form of contract and estimate of cost for the Fiber Extension to the Water Resource Recovery Facility Project.

Recommendation: Roll call is in order.

Attachments: 1. Res 2022- adopting plans for WRRF Fiber Expansion

This being the time and place fixed for a public hearing on the matter of the adoption of plans, specifications, form of contract and estimate of cost relative to the Fiber Extension to the Water Resource Recovery Facility Project for Indianola Municipal Utilities, Indianola, Iowa, the Chair called for any oral objections to the adoption of the plans, specifications, form of contract and estimate of costs. _________ oral objections were offered or filed prior to the meeting. Any objections are affixed to this resolution.

____________ introduced the following resolution entitled "Resolution adopting plans, specifications, form of contract and estimate of costs" and moved for its adoption. Board Member __________ seconded the motion to adopt. The roll was called, and the vote was

AYES:
NAYS:
ABSENT:
VACANT:

Whereupon, the Chair declared the following resolution duly adopted:

Indianola Municipal Utilities

RESOLUTION NO 2022-

RESOLUTION ADOPTING PLANS, SPECIFICATIONS, FORM OF CONTRACT AND ESTIMATE OF COST

WHEREAS, on the 19th day of January, 2022, plans, specifications, form of contract and estimate of cost were filed with the City Clerk for the Indianola Municipal Utilities, for the Fiber Extension to the Water Resource Recovery Facility Project for Indianola Municipal Utilities, Indianola, Iowa; and

WHEREAS, notice of hearing on plans, specifications, form of contract and estimate of costs of the public improvements was published as required by law.

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the Indianola Municipal Utilities that the plans, specifications, form of contract and estimate of cost are approved as the plans, specifications, form of contract and estimate of cost of the public improvement described in the preamble of this resolution.

Passed and approved this 14th day of February 2022.

____
Adam Voigts, Chairperson

ATTEST:

____
Jackie Raffety, City Clerk

INDIANOLA MUNICIPAL UTILITIES

Electric • Communications • Water

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Resolution awarding a construction contract for the Fiber Extension to the Water Resource Recovery Facility Project.

Recommendation: Roll call is in order.

Attachments:
1. Recommendation letter IMU Fiber Extension to WRRF
2. IMU Network Extension to WRRF Bid Tabulation Form
3. Res 2022- awarding contract

NewCom Technologies, Inc.
6000 Grand Avenue
Des Moines, Iowa 50312
800-626-6234
515 274-9611 (Local)
515 274-9622 (FAX)
newcom@newcomtech.com

February 11, 2022

Mr. Kurt Ripperger, Communications Superintendent
Indianola Municipal Utilities
110 South B Street
Indianola, IA 50125

Subject: Engineer's Recommendation for Indianola Municipal Utilities (IMU) Fiber Network Extension to Water Resource Recovery Facility (WRRF)

Dear Mr. Ripperger:

Sealed bids for the work comprising the project named above that were received by the deadline were opened and tabulated on February 7, 2022, and filed with the Indianola City Clerk.

LICENSED PROFESSIONAL ENGINEER
BETHANY J.
KEPHART
17120
IOWA

Signature:
My License Expires On: 12/31/2023

D

Bethany Kephart

NewCom goes the extra mile!

NewCom Technologies Inc. has determined that the lowest responsive, responsible bidder authorized to transact business for this project is Murphy Tower Service, LLC (dba Murphy Communications). Please review the attached spreadsheet for a summary of bid submittal criteria and cost estimates. It is recommended that the project be awarded to the lowest responsive, responsible bidder at this time based on a review of qualifications. Please contact the Engineer at NewCom Technologies, Inc. with any questions regarding this information.

Item	Bid Total Item Nos. 1-6	Bid Total Overall
Bid Estimate from Murphy Tower Service, LLC	$ 84,880.00	$ 96,755.80
Engineer's Estimate	$ 103,910.00	$ 115,016.00
Variance from Engineer's Estimate	$ (-) 19,030.00	$ (-) 18,260.20

Name of Engineer: Bethany J. Kephart, P.E.

License Number: 17120

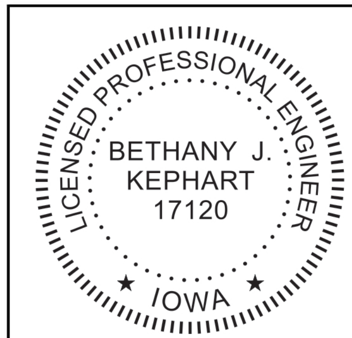
INDIANOLA MUNICIPAL UTILITIES
FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY
BID TABULATION 2-10-2022

Item No.	Item	Unit	Quantity in Bid Request	Engineer's Estimate		TekLink Communications LLC Blanchard, OK			Communication Data Link Grimes, IA		
				Unit Price	Total Extended	Unit Price	Vendor Extended	Total Extended	Unit Price	Vendor Extended	Total Extended
1	Underground - Directional Drilled: Furnish & Install, 1.5" Conduit with mule tape	LF	7,860	$12.00	$ 94,320.00	$ 13.48	$ 105,953.29	$ 105,952.80	$ 9.75	$ 76,635.00	$ 76,635.00
2	Ground Rods and ground kits: Furnish and Install	EA	3	$75.00	$ 225.00	$ 48.77	$ 146.31	$ 146.31	$ 150.00	$ 450.00	$ 450.00
3	Fiber Marker Posts with Test Stations: Furnish and Install	EA	3	$175.00	$ 525.00	$ 209.57	$ 628.71	$ 628.71	$ 150.00	$ 450.00	$ 450.00
4	Fiber Marker Posts: Furnish and Install	EA	8	$80.00	$ 640.00	$ 82.68	$ 661.41	$ 661.44	$ 100.00	$ 800.00	$ 800.00
5	24x36x24 Hand Hole: Install Only	EA	12	$450.00	$ 5,400.00	$ 235.00	$ 2,820.00	$ 2,820.00	$ 500.00	$ 6,000.00	$ 6,000.00
6	13x24x24 Hand Hole: Install Only	EA	7	$400.00	$ 2,800.00	$ 185.00	$ 1,295.00	$ 1,295.00	$ 400.00	$ 1,600.00	$ 2,800.00
7	Armored Fiber Optic Cable Installation (72 count or 96 count): Install Only	LF	9,060	$0.80	$ 7,248.00	$ 1.00	$ 9,060.00	$ 9,060.00	$ 0.85	$ 7,701.00	$ 7,701.00
8	B Size Splice Cases with Trays Installation: Install Only	EA	2	$375.00	$ 750.00	$ 250.00	$ 500.00	$ 500.00	$ 150.00	$ 300.00	$ 300.00
9	Splicing and Testing per Fiber Strands	EA	84	$37.00	$ 3,108.00	$ 36.00	$ 3,024.00	$ 3,024.00	$ 40.00	$ 3,360.00	$ 3,360.00
								$ -			$ -
	SUBTOTAL (Item Nos. 1-6):				**$ 103,910.00**		$ 111,504.72	$ 111,504.26		$ 85,935.00	$ 87,135.00
	SUBTOTAL (Item Nos. 7-9):				**$ 11,106.00**		$ 12,584.00	$ 12,584.00		$ 11,361.00	$ 11,361.00
	ENGINEER'S ESTIMATE (Item Nos. 1-9):				**$ 115,016.00**		$ 124,088.72	$ 124,088.26		$ 97,296.00	$ 98,496.00
	VARIANCE FROM ENGINEER'S ESTIMATE (Item Nos. 1-6 only):							7%			-16%
	VARIANCE FROM ENGINEER'S ESTIMATE (Item Nos. 1-9):							8%			-14%
	Footnotes:							(1)			(2)

General Notes:
A. Price includes state and local tax and freight
B. Alternate item pricing is presented for Items No 7, 8 & 9

Footnotes;
(1) Rounding discrepancy btwn. Vendor and Total Extended
(2) Calculation error - Vendor Extended
(3) Total Bid price on Bid Schedule does not match Vendor and Total Extended

BID SUBMITTAL CRITERIA			TekLink Communications LLC	Communication Data Link
Bid received on time	YES/NO		YES	YES
Bid Schedule	YES/NO		YES	YES
Signed Bid Form	YES/NO		YES	YES
Bidder Status Form	YES/NO		YES	YES
Bid Security & Amount	YES/NO	% OR $ AMT	YES - 10%	YES - 10%
Signed Addendum #1	YES/NO		YES	YES



I hereby certiy that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Profesiona Engineer under the laws of the State of Iowa

Bethany Kephart (Signature) 2/10/2022 (Date)

Printed or typed name: Bethany Kephart

License number: 17120

My license renewal date is December 31, 2023

Pages or sheets covered by this seal: IMU Network Extension to WRRF - Bid Tabulation

INDIANOLA MUNICIPAL UTILITIES
FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY
BID TABULATION 2-10-2022

Item No.	Item	Unit	Quantity in Bid Request	TD&I Cable Maintenance, Inc., Hudson, WI Unit Price	TD&I Vendor Extended	TD&I Total Extended	KLK Construction, Pella, IA Unit Price	KLK Vendor Extended	KLK Total Extended	Murphy Tower Service, Carlisle, IA Unit Price	Murphy Vendor Extended	Murphy Total Extended
1	Underground - Directional Drilled: Furnish & Install, 1.5" Conduit with mule tape	LF	7,860	$ 10.81	$ 84,966.60	$ 84,966.60	$ 15.00	$ 117,900.00	$ 117,900.00	$ 10.00	$ 78,600.00	$ 78,600.00
2	Ground Rods and ground kits: Furnish and Install	EA	3	$ 182.50	$ 547.50	$ 547.50	$ 45.00	$ 135.00	$ 135.00	$ 35.00	$ 105.00	$ 105.00
3	Fiber Marker Posts with Test Stations: Furnish and Install	EA	3	$ 154.61	$ 463.83	$ 463.83	$ 100.00	$ 300.00	$ 300.00	$ 70.00	$ 210.00	$ 210.00
4	Fiber Marker Posts: Furnish and Install	EA	8	$ 84.61	$ 676.88	$ 676.88	$ 65.00	$ 520.00	$ 520.00	$ 55.00	$ 440.00	$ 440.00
5	24x36x24 Hand Hole: Install Only	EA	12	$ 462.00	$ 5,544.00	$ 5,544.00	$ 800.00	$ 9,600.00	$ 9,600.00	$ 300.00	$ 3,600.00	$ 3,600.00
6	13x24x24 Hand Hole: Install Only	EA	7	$ 293.00	$ 2,051.00	$ 2,051.00	$ 650.00	$ 4,550.00	$ 4,550.00	$ 275.00	$ 1,925.00	$ 1,925.00
7	Armored Fiber Optic Cable Installation (72 count or 96 count): Install Only	LF	9,060	$ 1.68	$ 15,220.80	$ 15,220.80	$ 1.35	$ 12,231.00	$ 12,231.00	$ 0.93	$ 8,425.80	$ 8,425.80
8	B Size Splice Cases with Trays Installation: Install Only	EA	2	$ 388.00	$ 776.00	$ 776.00	$ 300.00	$ 600.00	$ 600.00	$ 255.00	$ 510.00	$ 510.00
9	Splicing and Testing per Fiber Strands	EA	84	$ 45.00	$ 3,780.00	$ 3,780.00	$ 55.00	$ 4,620.00	$ 4,620.00	$ 35.00	$ 2,940.00	$ 2,940.00
						$ -			$ -			$ -
			SUBTOTAL (I		$ 94,249.81	$ 94,249.81		$ 133,005.00	$ 133,005.00		$ 84,880.00	$ 84,880.00
			SUBTOTAL (I		$ 19,776.80	$ 19,776.80		$ 17,451.00	$ 17,451.00		$ 11,875.80	$ 11,875.80
			ENGINEER'S ESTIMATE (I		$ 114,026.61	$ 114,026.61		$ 150,456.00	$ 150,456.00		$ 96,755.80	$ 96,755.80
			VARIANCE FROM ENGINEER'S E			-9%			28%			-18%
			VARIANCE FROM ENGINEE			-1%			31%			-16%

General Notes:
A. Price includes state and local tax and freight
B. Alternate item pricing is presented for Items No 7, 8 & 9

Footnotes;
(1) Rounding discrepancy btwn. Vendor and Total Extended
(2) Calculation error - Vendor Extended
(3) Total Bid price on Bid Schedule does not match Vendor and Total Extended

BID SUBMITTAL CRITERIA	TD&I Cable Maintenance, Inc., Hudson, WI	KLK Construction, Pella, IA	Murphy Tower Service, Carlisle, IA
Bid received on time	YES	YES	YES
Bid Schedule	YES	YES	YES
Signed Bid Form	YES	YES	YES
Bidder Status Form	YES	YES	YES
Bid Security & Amount	YES - 10%	YES - 10%	YES - 10%
Signed Addendum #1	YES	YES	YES

INDIANOLA MUNICIPAL UTILITIES
FIBER NETWORK EXTENSION TO WATER RESOURCE RECOVERY FACILITY
BID TABULATION 2-10-2022

Item No.	Item	Unit	Quantity in Bid Request	Kramer Service Group LLC Weyerhaeuser, WI Unit Price	Vendor Extended	Total Extended	Innovative Communication Technologies LLC, Ankeny, IA Unit Price	Vendor Extended	Total Extended
1	Underground - Directional Drilled: Furnish & Install, 1.5" Conduit with mule tape	LF	7,860	$ 11.00	$ 86,460.00	$ 86,460.00	$ 12.25	$ 96,285.00	$ 96,285.00
2	Ground Rods and ground kits: Furnish and Install	EA	3	$ 65.00	$ 195.00	$ 195.00	$ 55.00	$ 165.00	$ 165.00
3	Fiber Marker Posts with Test Stations: Furnish and Install	EA	3	$ 150.00	$ 450.00	$ 450.00	$ 50.00	$ 150.00	$ 150.00
4	Fiber Marker Posts: Furnish and Install	EA	8	$ 125.00	$ 1,000.00	$ 1,000.00	$ 40.00	$ 320.00	$ 320.00
5	24x36x24 Hand Hole: Install Only	EA	12	$ 550.00	$ 6,600.00	$ 6,600.00	$ 500.00	$ 6,000.00	$ 6,000.00
6	13x24x24 Hand Hole: Install Only	EA	7	$ 425.00	$ 2,975.00	$ 2,975.00	$ 400.00	$ 2,800.00	$ 2,800.00
7	Armored Fiber Optic Cable Installation (72 count or 96 count): Install Only	LF	9,060	$ 0.90	$ 8,154.00	$ 8,154.00	$ 1.00	$ 9,060.00	$ 9,060.00
8	B Size Splice Cases with Trays Installation: Install Only	EA	2	$ 250.00	$ 500.00	$ 500.00	$ 350.00	$ 700.00	$ 700.00
9	Splicing and Testing per Fiber Strands	EA	84	$ 28.00	$ 2,352.00	$ 2,352.00	$ 40.00	$ 3,360.00	$ 3,360.00
						$ -			$ -
			SUBTOTAL (I		$ 97,680.00	$ 97,680.00		$ 105,720.00	$ 105,720.00
			SUBTOTAL (I		$ 11,006.00	$ 11,006.00		$ 13,120.00	$ 13,120.00
			ENGINEER'S ESTIMATE (I		$ 108,686.00	$ 108,686.00		$ 118,840.00	$ 118,840.00
			VARIANCE FROM ENGINEER'S E			-6%			2%
			VARIANCE FROM ENGINEE			-6%			3%
									(3)

General Notes:
A. Price includes state and local tax and freight
B. Alternate item pricing is presented for Items No 7, 8 & 9

Footnotes;
(1) Rounding discrepancy btwn. Vendor and Total Extended
(2) Calculation error - Vendor Extended
(3) Total Bid price on Bid Schedule does not match Vendor and Total Extended

BID SUBMITTAL CRITERIA	Kramer Service Group LLC	Innovative Communication Technologies LLC
Bid received on time	YES	YES
Bid Schedule	YES	YES
Signed Bid Form	YES	YES
Bidder Status Form	YES	YES
Bid Security & Amount	YES - 10%	YES - 10%
Signed Addendum #1	YES	YES

The Chair then announced that the City Clerk and Fiber Superintendent had opened and tabulated the bids for the public improvements described in general as the Fiber Extension to the Water Resource Recovery Facility Project for Indianola Municipal Utilities in accordance with the plans and specifications previously adopted.

The following bids were presented by the City Clerk and Fiber Superintendent:

Company	**Bid Amount (Items 1-6)**	**Bid Total Overall**
TekLink Communications	$111,504.26	$124,088.26
Communication Data Link	$87,135.00	$98,496.00
TD&I Cable Maintenance	$94,249.81	$114,026.61
KLK Construction	$133,005.00	$150,456.00
Murphy Tower	$84,880.00	$96,755.80
Kramer Service Group	$97,680.00	$108,686.00
Innovative Communication Technologies	$105,720.00	$118,840.00

It was moved by ________ and seconded by _________ to award the contract for the Fiber Extension to the Water Resource Recovery Facility Project to ______________ in an amount of ______________ and adopt the resolution entitled "Resolution making award of construction contract."

AYES:
NAYS:
ABSENT:
VACANT:

Whereupon, the Chair declared the following resolution duly adopted:

Indianola Municipal Utilities

RESOLUTION NO 2022-

RESOLUTION MAKING AWARD OF CONSTRUCTION CONTRACT

BE IT RESOLVED by the Board of Trustees of the Indianola Municipal Utilities that:

1. The bid of ____________ in the amount of $____________ for the Fiber Extension to the Water Resource Recovery Facility Project for Indianola Municipal Utilities, Indianola, Iowa, described in the plans and specifications previously adopted by this Board on the 14th day of February 2022, is accepted, it being the most responsible bid for the work and materials.

2. The IMU Communications Superintendent and the City Clerk are directed to execute a contract with the contractor for the construction of the public improvement. The contract not to be binding on the Board of Trustees until approved by the Board.

Passed and approved this 14th day of February 2022.

____
Adam Voigts, Chairperson

ATTEST:

____
Jackie Raffety, City Clerk

INDIANOLA MUNICIPAL UTILITIES
Electric • Communications • Water

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Selection of 2022 Officers

Recommendation: Past practice for office holders is one of rotating seniority, with each Trustee having the ability to serve as Chair and Vice Chair during a 6-year tenure. However, it is solely up to the Board to select its officers in any given year.

Selection of a Chair and Vice Chair is in order.

Simple motion is in order.

Attachments: None

MEMORANDUM

To: IMU Board of Trustees of the Electric, Water and Communications Utilities

From:

Date: February 14, 2022

Subject: Operation and Maintenance draft budget presentation and discussion.

Recommendation:

Attachments: 1. FY23 O&M Draft Summary for Packet

IMU Board of Trustees
Fund Summary

	July 1, 2021 Beginning Balance	FY '22 Re-Estimated Revenue	FY '22 Re-Estimated Expenditures	June 30, 2022 Ending Balance	FY '23 Budgeted Revenue	FY '23 Budgeted Expenditures	June 30, 2023 Ending Balance
Total Electric Utility	$ 12,929,148	$ 18,894,928	$ 19,345,705	$ 12,478,371	$ 19,809,206	$ 19,815,779	$ 12,471,799
Total Water Utility	$ 2,785,175	$ 3,306,100	$ 3,285,957	$ 2,805,318	$ 4,480,150	$ 4,520,611	$ 2,764,857
Communications Utility	$ 222,680	$ 5,105,200	$ 4,960,689	$ 367,191	$ 7,085,720	$ 7,078,616	$ 374,295
IMU Administration	$ 382,873	$ 1,251,911	$ 1,236,800	$ 397,984	$ 1,342,700	$ 1,342,700	$ 397,984
855 Insurance Reserve	$ -	$ 100	$ -	$ 100	$ -	$ 10,000	$ (9,900)
Total IMU Board of Trustees	$ 16,319,877	$ 28,558,239	$ 28,829,151	$ 16,048,965	$ 32,717,776	$ 32,767,706	$ 15,999,034

Electric Utility
Fund Summary

	July 1, 2021 Beginning Balance	FY '22 Re-Estimated Revenue	FY '22 Re-Estimated Expenditures	June 30, 2022 Ending Balance	FY '23 Budgeted Revenue	FY '23 Budgeted Expenditures	June 30, 2023 Ending Balance
Electric Utility:							
630 Electric O&M	$ 6,473,202	$ 16,587,878	$ 15,564,255	$ 7,496,825	$ 17,653,856	$ 16,204,529	$ 8,946,153
730 Electric Capital	$ 4,598,601	$ 1,173,600	$ 2,348,000	$ 3,424,201	$ 1,021,600	$ 2,477,500	$ 1,968,301
793 Electric Rev. Bonds	$ 1,368,248	$ 1,133,450	$ 1,133,450	$ 1,368,248	$ 1,133,750	$ 1,133,750	$ 1,368,248
625 (& 626) RLF	$ 489,097	$ -	$ 300,000	$ 189,097	$ -	$ -	$ 189,097
Total Electric Utility	$ 12,929,148	$ 18,894,928	$ 19,345,705	$ 12,478,371	$ 19,809,206	$ 19,815,779	$ 12,471,799

Water Utility
Fund Summary

	July 1, 2021 Beginning Balance	FY '22 Re-Estimated Revenue	FY '22 Re-Estimated Expenditures	June 30, 2022 Ending Balance	FY '23 Budgeted Revenue	FY '23 Budgeted Expenditures	June 30, 2023 Ending Balance
Water Utility:							
600 Water O&M	$ 221,538	$ 2,826,600	$ 2,381,557	$ 666,581	$ 3,251,950	$ 3,292,411	$ 626,119
700 Water Capital	$ 2,488,637	$ 424,900	$ 849,800	$ 2,063,737	$ 1,174,000	$ 1,174,000	$ 2,063,737
790 Water Rev. Bonds	$ -	$ 54,600	$ 54,600	$ -	$ 54,200	$ 54,200	$ -
780 Water Impr. Reserves	$ 75,000	$ -	$ -	$ 75,000	$ -	$ -	$ 75,000
Total Water Utility	$ 2,785,175	$ 3,306,100	$ 3,285,957	$ 2,805,318	$ 4,480,150	$ 4,520,611	$ 2,764,857

Communications Utility
Fund Summary

	July 1, 2021 Beginning Balance	FY '22 Re-Estimated Revenue	FY '22 Re-Estimated Expenditures	June 30, 2022 Ending Balance	FY '23 Budgeted Revenue	FY '23 Budgeted Expenditures	June 30, 2023 Ending Balance
Comm Utility:							
640 Comm O&M	$ 222,680	$ 4,432,300	$ 4,510,689	$ 144,291	$ 4,907,320	$ 4,900,616	$ 150,995
740 Comm Capital	$ -	$ 672,900	$ 450,000	$ 222,900	$ 2,178,400	$ 2,178,000	$ 223,300
Comm Rev. Bonds	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Comm Utility	$ 222,680	$ 5,105,200	$ 4,960,689	$ 367,191	$ 7,085,720	$ 7,078,616	$ 374,295

Utility Services IMU Admin
Fund Summary

	July 1, 2021 Beginning Balance	FY '22 Re-Estimated Revenue	FY '22 Re-Estimated Expenditures	June 30, 2022 Ending Balance	FY '23 Budgeted Revenue	FY '23 Budgeted Expenditures	June 30, 2023 Ending Balance
Utility Services & IMU Admin							
620 Utility Services & Imu Admin	$ 382,873	$ 1,251,911	$ 1,236,800	$ 397,984	$ 1,342,700	$ 1,342,700	$ 397,984
Total Utility Services & IMU Admin	$ 382,873	$ 1,251,911	$ 1,236,800	$ 397,984	$ 1,342,700	$ 1,342,700	$ 397,984