



**Grinnell PUBLIC WORKS AND GROUNDS Meeting  
MONDAY, MARCH 2, 2020 AT 4:45 P.M.  
IN THE 2<sup>ND</sup> FLOOR COUNCIL CHAMBERS OF  
THE CITY HALL**

***TENTATIVE AGENDA***

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**ROLL CALL:** Hueftle-Worley (Chair), Wray, Gaard.

**PERFECTING AND APPROVAL OF AGENDA:**

**COMMITTEE BUSINESS:**

1. Set public hearing date on the proposed contract documents (plans, specifications and form of contract) and estimate of cost for the construction of the 16<sup>th</sup> Avenue Culvert Replacement Project on March 16 at 7:00 p.m. and direct clerk to publish notice to bidders.
2. Consider resolution authorizing payment of contractor's pay request No. 6 in the amount of \$32,081.23 to Manatts, Inc. of Brooklyn, Iowa for the Runway Rehabilitation Project (See Resolution No. 2020-32).

**INQUIRIES:**

**ADJOURNMENT:**

NOTICE OF PUBLIC HEARING

NOTICE OF PUBLIC HEARING ON PROPOSED PLANS AND SPECIFICATIONS,  
PROPOSED FORM OF CONTRACT AND ESTIMATE OF COST FOR THE  
CONSTRUCTION OF THE 16<sup>TH</sup> AVENUE CULVERT REPLACEMENT PROJECT, FOR THE  
CITY OF GRINNELL, IOWA.

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At 7:00 P.M. on the 16th day of March, 2020, the City Council of said City will, in said Council Chambers, hold a hearing and said Council 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 the following improvements:

16<sup>TH</sup> AVENUE CULVERT REPLACEMENT PROJECT

Construct 16<sup>th</sup> Avenue Culvert Replacement Project including all labor, materials and equipment necessary for construction of a 57-foot long 10-foot x 5-foot Reinforced Concrete Box Culvert (RCBC) with headwalls with approximately 50 linear feet of 8-inch, 24-foot PCC pavement, surfacing removal, subbase preparation, modified subbase, 35 linear feet of 12-inch sanitary sewer replacement, sidewalks, culvert abandonment, and miscellaneous associated work, including cleanup.

At said hearing, the City Council will consider the plans, specifications, proposed form of contract, and estimated total cost for the project, the same now being on file in the office of the City 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 Council will also receive and consider any objections to said plans, specifications, estimate of cost and form of contract made by any interested party.

This notice is given by order of the Council of the City of Grinnell, Iowa.

CITY OF GRINNELL, IOWA

Dan F. Agnew, Mayor

ATTEST:

Ann Wingerter, City Clerk

NPH-1

288149

## NOTICE TO BIDDERS

### NOTICE OF TAKING BIDS FOR THE CONSTRUCTION OF 16<sup>TH</sup> AVENUE CULVERT REPLACEMENT PROJECT FOR THE CITY OF GRINNELL, IOWA

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Sealed proposals will be received by the City Clerk of the City of Grinnell, Iowa, in the Council Chambers, City Hall, 520 Fourth Avenue, Grinnell, Iowa 50112 until 2:00 P.M. on the 31st day of March 2020, for the construction of the 16<sup>th</sup> Avenue Culvert Replacement Project, as described in the plans and specifications therefor, now on file in the office of the City Clerk. Proposals will be opened and the amount of the bids announced by the City Clerk at the time and date specified above.

Also, at 7:00 P.M. on the 6th day of April 2020, the City Council of said City will, in said Council Chambers, 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:

#### 16<sup>TH</sup> AVENUE CULVERT REPLACEMENT PROJECT

Construct 16<sup>th</sup> Avenue Culvert Replacement Project including all labor, materials and equipment necessary for construction of a 57-foot long 10-foot x 5-foot Reinforced Concrete Box Culvert (RCBC) with headwalls with approximately 50 linear feet of 8-inch, 24-foot PCC pavement, surfacing removal, subbase preparation, modified subbase, 35 linear feet of 12-inch sanitary sewer replacement, sidewalks, culvert abandonment, and miscellaneous associated work, including cleanup.

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 City Clerk of Grinnell, Iowa, and by this reference made a part thereof as though fully set out and incorporated herein.

All proposals in connection therewith shall be submitted to the City Clerk of said City on or before the time herein set for said letting. All proposals shall be made on official bidding blanks furnished by the City, and any alterations in the official form of proposal will entitle the Council, at its option, to reject the proposal involved from consideration. Each proposal shall be sealed and plainly identified.

Each proposal shall be made out on a blank form furnished by the municipality and must be accompanied in a sealed envelope by either (1) a certified or cashier's check drawn on a solvent Iowa bank or a bank chartered under the laws of the United States or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United

## Notice to Bidders

States, in an amount equal to five percent (5%) of the bid, or (2) a bid bond executed by a corporation authorized to contract as a surety in the State of Iowa, in the penal sum of five percent (5%) of the bid.

The bid security should be made payable to the CITY OF GRINNELL, IOWA. 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 City as liquidated damages in the event the successful bidder fails or refuses to enter into a contract within 10 days after the award of contract and post bond satisfactory to the City insuring the faithful fulfillment of the contract and the maintenance of said work, if required, pursuant to the provisions of this notice and other contract documents. Bidders shall use the bid bond form bound in the specifications.

By virtue of statutory authority, 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 City Council reserves the right to reject any or all bids and to waive informalities or technicalities in any bid and to accept the bid which it deems to be in the best interest of the City.

The Council reserves the right to defer acceptance of any proposal for a period not to exceed thirty (30) calendar days from the date of letting.

The successful bidder will be required to furnish a 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 City Council 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 City 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 four (4) years after its completion and acceptance by the City Council.

The work will commence within ten (10) days after date set forth in written Notice to Proceed and shall be completed no later than August 31, 2020.

Liquidated damages in the amount of Five Hundred Dollars (\$500.00) per consecutive calendar day will be assessed for each day that work shall remain 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.

## Notice to Bidders

Payment to the Contractor for said improvements will be made in cash derived from the proceeds of the issuance and sale of such bonds and/or from such cash funds of the City as may be legally used for said purposes. Any combination of the above methods of payment may be used at the discretion of the City Council.

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 payments made to material suppliers for materials ordered specifically for the project or delivered to the site during the preceding calendar month. Estimates will be prepared approximately 10 days prior to the first Monday of the following month by the Contractor, subject to the approval of the Engineer, who will certify to the City for payment. The City reviews and approves estimates on the first Monday of the 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. Upon completion of the work and its acceptance by the Council, 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 City Council of the completed contract, subject to the conditions and in accordance with the provisions of Chapter 573 of the Code of Iowa, as amended. No such partial or final payments will be due until the Contractor has certified to the City that the materials, labor and services involved in each estimate have been paid for in accordance with the requirements stated in the specifications.

The City will issue a sales tax exemption certificate applicable for all materials purchased for the project.

Plans and specifications governing the construction of the proposed improvements, and also the prior proceedings of the City Council 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 will be available by March 9, 2020 in the office of the City Clerk, for examination by bidders. Copies may be obtained from VEENSTRA & KIMM, INC., 3000 Westown Parkway, West Des Moines, Iowa 50266 at no charge.

Notice to Bidders

This notice is given by order of the Council of the City of Grinnell, Iowa.

CITY OF GRINNELL, IOWA

Dan F. Agnew, Mayor

ATTEST:

Ann Wingerter, City Clerk

NB-4

288149

RESOLUTION NO. 2020-32

A RESOLUTION AUTHORIZING PAYMENT OF CONTRACTOR'S PAY REQUEST NO. 6 IN THE AMOUNT OF \$32,081.23 TO MANATTS, INC OF BROOKLYN, IA FOR WORK COMPLETED ON THE RUNWAY REHABILITATION PROJECT

WHEREAS, the City of Grinnell did enter into a contract with Manatts, Inc. of Brooklyn, IA on September 6, 2018 and

WHEREAS, Pay Request No. 6 has been initiated by the City of Grinnell and Manatts Inc. of Brooklyn, IA; and

WHEREAS, the Project Engineer has verified completion of the project in accordance with the terms of the contract and recommends approval of Pay Request No. 6; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRINNELL, IOWA,

Section 1. That said improvements are hereby accepted as having been substantially completed in accordance with the said plans, specifications and contract. The City Clerk is hereby authorized and directed to make payment in the amount of \$32,081.23 to Manatts, Inc. of Brooklyn, IA.

Passed and adopted this 2nd day of March 2020.

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Dan F. Agnew, Mayor

Attest:

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Annmarie Wingerter, City Clerk/Finance Director

# CONSTRUCTION PROGRESS REPORT

**Project Description:** Rehabilitate Runway Improvements  
Grinnell Regional Airport  
Grinnell, Iowa

**Date of Contract:** September 6, 2018

**Estimate: No.:** 6

**Completion Date:**

**Contractor:** Manatt's, Inc.

**Owner:** City of Grinnell, Iowa

Base Contract Price	\$3,650,075.54	Construction Completed ( See Attached Tab)	\$2,916,187.17
Change Order No. 1	-\$98,250.00	Stored Materials	\$191,441.21
		Total Amount Earned	\$3,107,628.38
		Less 5% Retainage	-\$155,381.42
		Subtotal	\$2,952,246.96
		Less Previous Payment	\$2,920,165.73
<b>Total Contract Amount</b>	<b>\$3,551,825.54</b>	<b>AMOUNT DUE THIS ESTIMATE</b>	<b>\$32,081.23</b>

*Requested by Contractor:*

**Jared McGrew**  
Manatt's, Inc.

Digitally signed by Jared McGrew  
DN: cn=Jared McGrew  
Reason: I am approving this document  
Contact info: Jared McGrew  
Date: 2020.02.26 11:28:58-0800

**Project Manager**

Title

**2/26/2020**

Date

*Recommended by Engineer:*

  
Chapsaddle-Garber Associates, Inc.

Project Engineer

Title

**2/26/2020**

Date

*Approved by Owner:*

City of Grinnell

Title

Date

**Tabulation of Construction Quantities**  
**Rehabilitate Runway Improvements**  
**Grinnell Regional Airport**  
**Grinnell, Iowa**

Period Ending: February 22, 2020  
 Estimate No.: 6

Item No	Description	Unit	Unit Bid Price	Contract		Completed	
				Quantity	Amount	Quantity	Amount
1	Engineers Field Office	Months	\$600.00	12	\$7,200.00	3	\$1,800.00
2	Mobilization	LS	\$178,000.00	1	\$178,000.00	0.90	\$160,200.00
3	Traffic Control	LS	\$20,000.00	1	\$20,000.00	0.90	\$18,000.00
4	Pavement Removal	SY	\$3.00	43,000	\$129,000.00	42,600.00	\$127,800.00
5	Unclassified Excavation	CY	\$9.00	10,260	\$92,340.00	10,260	\$92,340.00
6	Remove and Replace Unsuitable Material	CY	\$20.00	1,000	\$20,000.00	0	\$0.00
7	Silt Fence Installation and Removal	LF	\$1.40	15,000	\$21,000.00	12,800	\$17,920.00
8	Silt Fence Cleanout	LF	\$0.05	15,000	\$750.00	0	\$0.00
9	Rolled Erosion Control Products	SQ	\$10.00	1,000	\$10,000.00	0	\$0.00
10	Temporary Seeding, Fertilizing and Mulching	Acre	\$250.00	10	\$2,500.00	0	\$0.00
11	Temporary Mulching for Erosion Control	Acre	\$800.00	10	\$8,000.00	0	\$0.00
12	Fly Ash Treated Subgrade, 12"	SY	\$3.35	45,000	\$150,750.00	0	\$0.00
13	Fly Ash	Ton	\$70.00	3,200	\$224,000.00	0	\$0.00
14	Base Course, 6"	SY	\$10.25	46,000	\$471,500.00	45,429.2	\$465,649.32
15	PCC Paving, 6"	SY	\$31.15	44,000	\$1,370,600.00	43,022.20	\$1,340,141.53
16	Tie-Down Anchors	EA	\$100.00	3	\$300.00	0	\$0.00
17	Pavement Markings, White, Temporary	SF	\$11.10	31,000	\$34,100.00	28,711	\$31,582.10
18	Pavement Markings, Yellow, Temporary	SF	\$2.00	1,800	\$3,600.00	1,690.00	\$3,380.00
19	Pavement Markings, White	SF	\$1.10	31,000	\$34,100.00	0	\$0.00
20	Pavement Markings, Yellow	SF	\$2.00	1,800	\$3,600.00	0	\$0.00
21	PCC Runway Pavement Grooving	SY	\$1.69	26,000	\$43,940.00	25,667.00	\$43,377.23
22	Storm Sewer Pipe Removal, 15" RCP	LF	\$23.00	192	\$4,416.00	192	\$4,416.00
23	6" HDPE Storm Sewer Pipe	LF	\$6.20	1,900	\$11,580.00	669	\$5,485.80
24	8" HDPE Storm Sewer Pipe	LF	\$9.30	2,700	\$25,110.00	2,463.00	\$22,905.90
25	15" RCP	LF	\$205.00	8	\$1,640.00	8	\$1,640.00
26	15" RCP Flared End Section	EA	\$2,000.00	1	\$2,000.00	1	\$2,000.00
27	18" RCP	LF	\$70.00	176	\$12,320.00	176	\$12,320.00
28	18" RCP Flared End Section	EA	\$1,800.00	2	\$3,600.00	2	\$3,600.00
29	4" Subdrain	LF	\$12.96	12,500	\$162,000.00	11,361	\$147,238.56
30	4" Field Tile Repair	LF	\$3.00	1,000	\$3,000.00	0	\$0.00
31	Field Tile Spot Repair	EA	\$350.00	20	\$7,000.00	1	\$350.00
32	Field Tile Connection to Existing Tile or Culvert	EA	\$500.00	10	\$5,000.00	1	\$500.00
33	Seeding, Fertilizing and Mulching	Acre	\$1,850.00	10	\$18,500.00	13.85	\$25,622.50
34	Topsoil Borrow (Furnished From Off Site)	CY	\$20.00	520	\$10,400.00	0	\$0.00
35	L-801A, Class II, Airport Rotating Beacon, in place	EA	\$6,932.80	1	\$6,932.80	0	\$0.00
36	55" Tip Down Rotating Beacon Tower and Foundation	EA	\$25,870.25	1	\$25,870.25	0.20	\$5,174.05
37	L-806 (L), LED, Style I-B, Internally Lighted, Size 1, Supplemental Wind Cone	EA	\$4,015.45	1	\$4,015.45	0	\$0.00
38	L-807 (L), LED, Style I-B, Internally Lighted, Size 2, Primary Wind Cone	EA	\$5,955.49	1	\$5,955.49	0	\$0.00
39	No. 4 AWG, 600V, L-824, THWN-2, Type C Cable, Installed in Trench, Duct or Conduit	LF	\$1.03	14,000	\$14,420.00	0	\$0.00
40	No. 4 AWG, 600V, L-824, THWN-2, Type C Equipment Ground Cable, Installed in Trench, Duct or Conduit	LF	\$0.84	7,000	\$5,880.00	0	\$0.00
41	No. 8 AWG, Solid, Bare Counterpoise Wire, Installed in Trench, Including Ground Rods and Connectors	LF	\$1.05	19,000	\$19,950.00	653	\$685.65
42	No. 8 AWG, 5KV, L-824, Type C Cable, Installed in Trench, Duct or Conduit	LF	\$0.86	23,000	\$19,780.00	0	\$0.00
43	No. 10 AWG, 600V, L-824, THWN-2, Type C Cable, Installed in Trench, Duct or Conduit	LF	\$0.43	3,500	\$1,505.00	0	\$0.00
44	No. 10 AWG, 600V, L-824, THWN-2, Type C Equipment Ground Cable, Installed in Trench, Duct or Conduit	LF	\$0.34	1,700	\$578.00	0	\$0.00
45	Step-Up Transformer, 10KVA, 120/240V-240/480V With 30A Fused Disconnect, AWOS Circuit	EA	\$1,781.27	1	\$1,781.27	0.90	\$1,603.14
46	Step-Down Transformer, 10KVA, 240/480V-120/240V With 30A Fused Disconnect, AWOS Circuit	EA	\$1,417.06	1	\$1,417.06	0	\$0.00
47	Buck-Boost Transformer, 1 10 KVA, 120/240V-12/24V, PAPI Circuit	EA	\$638.75	1	\$638.75	0.90	\$574.88
48	Airfield Vault Enclosure - Complete Operational System	EA	\$61,672.33	1	\$61,672.33	0.90	\$55,505.10
49	L-828 Constant Current Regulator, 10kw, Class I, Style I, Ferrarsonant	EA	\$8,306.40	2	\$16,612.80	1.80	\$14,951.52
50	Airfield Lighting Control Panel, Receiver Interface Unit, Lighting Contactor Panel	LS	\$19,519.98	1	\$19,519.98	0.90	\$17,567.88
51	Vault Grounding for Lightning Protection	LS	\$2,280.00	1	\$2,280.00	0.5	\$1,140.00
52	Vault Building Controls	LS	\$2,316.30	1	\$2,316.30	0	\$0.00
53	L-854, Air to Ground Radio Control Equipment, Type I, Style A	EA	\$2,618.06	1	\$2,618.06	0	\$0.00
54	1 Way 2 Inch Schedule 40 PVC Conduit, Including Trenching and Backfill	LF	\$2.72	19,000	\$51,680.00	0	\$0.00
55	2 Way 2 Inch Schedule 40 PVC Conduit, Including Trenching and Backfill	LF	\$3.57	200	\$714.00	0	\$0.00
56	3 Way 2 Inch Schedule 40 PVC Conduit, Including Trenching and Backfill	LF	\$3.92	300	\$1,176.00	0	\$0.00
57	4 Way 2 Inch Schedule 40 PVC Conduit, Including Trenching and Backfill	LF	\$5.14	300	\$1,542.00	0	\$0.00
58	5 Way 2 Inch Schedule 40 PVC Conduit, Including Trenching and Backfill	LF	\$6.79	700	\$4,753.00	0	\$0.00
59	1 Way 2 Inch Schedule 40 PVC Conduit, Encased in Concrete, including trench and backfill	LF	\$9.38	420	\$3,939.60	417.50	\$3,916.15
60	2 Way 2 Inch Schedule 40 PVC Conduit, Encased in Concrete, including trench and backfill	LF	\$13.28	190	\$2,523.20	187	\$2,483.36
61	4 Way 2 Inch Schedule 40 PVC Conduit, Encased in Concrete, including trench and backfill	LF	\$27.66	50	\$1,383.00	49	\$1,355.34
62	1 Way 2 Inch HDPE Conduit, Directionally Bored	LF	\$12.29	310	\$3,809.90	0	\$0.00
63	L-867 Electrical Handhole, Size D, 24" Deep	EA	\$597.45	10	\$5,974.50	0	\$0.00
64	Can Plaza with Two L-867 Electrical Hand Holes, Size D, 24" Deep	EA	\$2,800.41	2	\$5,600.82	0	\$0.00
65	Can Plaza with Three L-867 Electrical Hand Holes, Size D, 24" Deep	EA	\$3,265.80	1	\$3,265.80	0	\$0.00
66	Can Plaza with Four L-867 Electrical Hand Holes, Size D, 24" Deep	EA	\$4,000.81	2	\$8,001.62	0	\$0.00
67	Can Plaza with Five L-867 Electrical Hand Holes, Size D, 24" Deep	EA	\$6,381.83	3	\$19,145.49	0	\$0.00
68	L-861 (L) MIRL, LED, 24" Tall, Base Mounted Runway Edge Light w/ Artic Kit	EA	\$803.62	45	\$36,162.90	0	\$0.00
69	L-861E (L) MIRL, LED, 24" Tall, Base Mounted Runway Threshold Light w/ Artic Kit	EA	\$842.40	32	\$26,956.80	0	\$0.00
70	L-861T (L) MIRL, LED, 24" Tall, Base Mounted Taxiway Edge Light w/ Artic Kit	EA	\$782.46	75	\$58,684.50	0	\$0.00
71	L-858R (L) Guidance Sign, LED, Size 2, Style 2, Single Face, 1 Module	EA	\$2,291.20	3	\$6,873.60	0	\$0.00
72	L-849L (L) REIL, LED, Style C System	EA	\$13,012.36	2	\$26,024.72	0	\$0.00
73	L-881V, PAPI, Style A, Class II System	EA	\$20,486.63	2	\$40,973.26	0	\$0.00
74	Demolition of Existing Vault	LS	\$4,320.00	1	\$4,320.00	0	\$0.00
75	Demo and Removal of Existing Edge Lighting Systems, REIL, PAPI, Windcone and Beacon	LS	\$13,950.00	11	\$13,950.00	0.95	\$13,252.50
76	Spare Parts - Breakable Couplings for Runway Edge Lights	EA	\$9.14	12	\$109.68	0	\$0.00
77	Spare Parts - L-861 (L) MIRL, LED, Runway Edge Light Top Assembly w/ Artic Kit	EA	\$123.66	4	\$494.64	0	\$0.00
78	Spare Parts - L-861E (L) MIRL, LED, Threshold Light Top Assembly w/ Artic Kit	EA	\$123.66	2	\$247.32	0	\$0.00
79	Spare Parts - L-861T (L) MIRL, LED, Taxiway Edge Light Top Assembly w/ Artic Kit	EA	\$123.66	4	\$494.64	0	\$0.00
80	Spare Parts - White 180 Degree and Yellow 180 Degree Lenses	EA	\$36.56	8	\$292.48	0	\$0.00
81	Spare Parts - White 360 Degree Lenses	EA	\$36.56	4	\$146.24	0	\$0.00
82	Spare Parts - Green 180 Degree and Obscured 180 Degree Lenses	EA	\$36.56	4	\$146.24	0	\$0.00
83	Spare Parts - Red 360 Degrees	EA	\$36.56	4	\$146.24	0	\$0.00
84	Spare Parts - Blue 360 Degrees	EA	\$36.56	8	\$292.48	0	\$0.00
85	Spare Parts - PAPI, Lamp Bulb	EA	\$34.95	6	\$209.70	0	\$0.00
86	Spare Parts - Replacement Lamp Set for Rotating Beacon	SET	\$140.86	1	\$140.86	0	\$0.00
1-41	Add - No. 6 AWG, Solid, Bare Counterpoise Wire, Installed in Trench, Including Ground Rods and Connectors	LF	\$2.00	400	\$800.00	0	\$0.00
1-52	Deduct - Vault Building Controls	LS	-\$2,316.30	1	-\$2,316.30	0	\$0.00
1-47	Add - Terminal Building Vault Controls	LS	\$7,175.00	1	\$7,175.00	0	\$0.00
1-54	Add - 1 Way 2 Inch Schedule 40 PVC Conduit, Including Trenching and Backfill	LF	\$4.19	320	\$1,340.80	0	\$0.00
1-62	Add - 1 Way 2 Inch Schedule 40 PVC Conduit, Directionally Bored	LF	\$15.00	50	\$750.00	0	\$0.00
1-63	Add - L-867 Electrical Handhole, Size D, 24" Deep	LF	\$677.09	3	\$2,031.27	0	\$0.00
C01-12	Change Order No 1 - Deduct - Fly Ash Treated Subgrade, 12"	SY	-\$3.35	45,000	-\$150,750.00	0	\$0.00
C01-13	Change Order No 1 - Deduct - Fly Ash	Ton	-\$70.00	3,200	-\$224,000.00	0	\$0.00
C01-2-89	Change Order No 1 - Add - Cement Treated Subgrade, 12"	SY	\$2.60	45,000	\$117,000.00	44,196.55	\$114,911.03
C01-2-89	Change Order No 1 - Add - Cement	Ton	\$145.00	1,100	\$159,500.00	1,066.18	\$154,597.55
<b>Total</b>					<b>\$3,551,825.54</b>		<b>\$2,916,187.17</b>

TABULATION OF CONSTRUCTION QUANTITIES

Rehabilitate Runway Improvements  
 PROJECT NUMBER: 4448.06  
 ESTIMATE NO.: 6

FOR THE PERIOD ENDING February 22, 2020

Description of Material	(A) Materials on Site in Last Application	(B) Materials Added Since Last Application	(C) Material Used Since Last Application	(A+B-C) Materials on site in This Application
Bid Item No 35 - L-801A, Class II, Airport Rotating Beacon (Invoice No. 90052471 & 90053831)	\$5,849.15	\$0.00	\$0.00	\$5,849.15
Bid Item No 36 - 55' Tip Down Rotating Beacon Tower (Invoice No. 90059139)	\$18,849.21	\$0.00	\$0.00	\$18,849.21
Bid Item No 37 - L-806(L), LED, Style I-B, Internally Lighted, Size 1, Supplemental Wind Cone (Invoice No. 90061968, 90062283, 90062432, 90062916, 90062915)	\$2,380.54	\$0.00	\$0.00	\$2,380.54
Bid Item No 38 - L-807(L), LED, Style I-B, Internally Lighted, Size 2, Primary Wind Cone (Invoice No. 90062283, 90062432, 90062915)	\$3,940.84	\$0.00	\$0.00	\$3,940.84
Bid Item No 39 - No. 4, AWG, 600V, L-824, THWN-2, Type C Cable, Installed in Trench, Duct or Conduit (Invoice No. 6347903)	\$8,342.24	\$0.00	\$0.00	\$8,342.24
Bid Item No 40 - No. 4, AWG, 600V, L-824, THWN-2, Type C Equipment Ground Cable, Installed in Trench, Duct or Conduit (Invoice No. 6347903)	\$4,171.12	\$0.00	\$0.00	\$4,171.12
Bid Item No 41 - No. 6 AWG, Solid, Bare Counterpoise Wire, Installed in Trench, Including Ground Rods and Connectors (Invoice No. 6347903, 6362441)	\$9,266.64	\$0.00	\$0.00	\$9,266.64
Bid Item No 42 - No. 8 AWG, 5KV, L-824, Type C Cable, Installed in Trench, Duct or Conduit (Invoice No. 6394000)	\$9,350.00	\$0.00	\$0.00	\$9,350.00
Bid Item No 43 - No. 10 AWG, 600V, L-824, THWN-2, Type C Cable, Installed in Trench, Duct or Conduit (Invoice No. 6347903)	\$714.00	\$0.00	\$0.00	\$714.00
Bid Item No 44 - No. 10 AWG, 600V, L-824, THWN-2, Type C Equipment Ground Cable, Installed in Trench, Duct or Conduit (Invoice No. 6347903)	\$357.00	\$0.00	\$0.00	\$357.00
Bid Item No 45 - Step-Up Transformer, 10KVA, 120/240V-240/480V, With 30A Fused Disconnect, AWOS Circuit (Invoice No. 9311773381)	\$1,414.54	\$0.00	\$1,414.54	\$0.00
Bid Item No 46 - Step-Down Transformer, 10KVA, 240/480V-120/240V With 30A Fused Disconnect, AWOS Circuit (Invoice No. 9311773381)	\$1,048.30	\$0.00	\$0.00	\$1,048.30
Bid Item No 47 - BuckBoost Transformer, 1.10 KVA, 120/240V-12/24V, PAPI Circuit (Invoice No. 9311773381)	\$274.08	\$0.00	\$0.00	\$274.08
Bid Item No 49 - L-828 Constant Current Regulator, 10kw, Class I, Style I, Ferroresonant (Invoice No. 90062916)	\$18,880.88	\$0.00	\$18,880.88	\$0.00
Bid Item No 54 - 1 Way 2 inch Schedule 40 PVC Conduit, Including Trenching and Backfill (Invoice No. 6362441, 6336987-01)	\$12,532.44	\$0.00	\$0.00	\$12,532.44
Bid Item No 57 - 4 Way 2 inch Schedule 40 PVC Conduit, Including Trenching and Backfill (Invoice No. 6336987-01)	\$855.00	\$0.00	\$0.00	\$855.00
Bid Item No 58 - 5 Way 2 inch Schedule 40 PVC Conduit, Including Trenching and Backfill (Invoice No. 6336987-01)	\$2,280.00	\$0.00	\$0.00	\$2,280.00
Bid Item No 60 - 2 Way 2 inch Schedule 40 PVC Conduit, Encased in Concrete, Including Trench and Backfill (Invoice No. 6336987-01)	\$228.00	\$0.00	\$0.00	\$228.00
Bid Item No 63 - L-867 Electrical Handhole, Size D, 24" Deep (Invoice 90061968, 90062432, 90062916, 90062915)	\$2,758.30	\$0.00	\$0.00	\$2,758.30
Bid Item No 64 - Can Plaza with Two L-867 Electrical Hand Holes, Size D, 24" Deep (Invoice No. 90061968, 90062432, 90062916)	\$1,103.28	\$0.00	\$0.00	\$1,103.28
Bid Item No 65 - Can Plaza with Three L-867 Electrical Hand Holes, Size D, 24" Deep (Invoice No. 90061968, 90062432, 90062916)	\$827.46	\$0.00	\$0.00	\$827.46
Bid Item No 66 - Can Plaza with Four L-867 Electrical Hand Holes, Size D, 24" Deep (Invoice No. 90061968, 90062432, 90062916)	\$2,206.48	\$0.00	\$0.00	\$2,206.48
Bid Item No 67 - Can Plaza with Five L-867 Electrical Hand Holes, Size D, 24" Deep (Invoice No. 90061968, 90062432, 90062916, 90062915)	\$4,137.15	\$0.00	\$0.00	\$4,137.15
Bid Item No 68 - L-861 (L) MIRL, LED, 24" Tall, Base Mounted Runway Edge Light w/ Arctic Kit (Invoice No. 90061968, 90062432, 90062916, 90062915)	\$20,786.56	\$0.00	\$0.00	\$20,786.56
Bid Item No 69 - L-861E (L) MIRL, LED, 24" Tall, Base Mounted Runway Threshold Light w/ Arctic Kit (Invoice No. 90061968, 90062432, 90062916, 90062915)	\$15,859.64	\$0.00	\$0.00	\$15,859.64
Bid Item No 70 - L-851T (L) MIRL, LED, 24" Tall, Base Mounted Taxiway Edge Light w/ Arctic Kit (Invoice 90061968, 90062432, 90062916, 6347903)	\$25,261.91	\$0.00	\$0.00	\$25,261.91
Bid Item No 71 - L-858R (L) Guidance Sign, LED, Size 2, Style 2, Single Face, 1 Module (Invoice No. 90061968, 90062432, 90062916)	\$3,930.22	\$0.00	\$0.00	\$3,930.22
Bid Item No 72 - L-841 (L) REIL, LED, Style C System (Invoice No. 90061968, 90062432, 90062916)	\$14,161.85	\$0.00	\$0.00	\$14,161.85
Bid Item No 73 - L-841V (L) PAPI, Style A, Class II System (Invoice No. 90062432, 90062915, 90062916)	\$13,088.69	\$0.00	\$0.00	\$13,088.69
Bid Item No 76 - Spare Parts - Breakable Couplings for Runway Edge Lights (Invoice No. 90062916)	\$19.32	\$0.00	\$0.00	\$19.32
Bid Item No 77 - Spare Parts - L-861(L) MIRL, LED, Runway Edge Light Top Assembly w/ Arctic Kit (Invoice No. 90062916)	\$316.64	\$0.00	\$0.00	\$316.64
Bid Item No 78 - Spare Parts - L-861E (L) MIRL, LED, Threshold Light Top Assembly w/ Arctic Kit (Invoice No. 90062916)	\$284.52	\$0.00	\$0.00	\$284.52
Bid Item No 79 - Spare Parts - L-861T (L) MIRL, LED, Taxiway Edge Light Top Assembly w/ Arctic Kit (Invoice No. 90062916)	\$224.52	\$0.00	\$0.00	\$224.52
Bid Item No 80 - Spare Parts - White 180 Degree and Yellow 180 Degree Lenses (Invoice No. 90062916)	\$888.00	\$0.00	\$0.00	\$888.00
Bid Item No 81 - Spare Parts - White 360 Degree Lenses (Invoice No. 90062916)	\$377.04	\$0.00	\$0.00	\$377.04
Bid Item No 82 - Spare Parts - Green 180 Degree and Obscured 180 Degree Lenses (Invoice No. 90062916)	\$505.44	\$0.00	\$0.00	\$505.44
Bid Item No 83 - Spare Parts - Red 360 Degrees (Invoice No. 90062916)	\$638.12	\$0.00	\$0.00	\$638.12
Bid Item No 84 - Spare Parts - Blue 360 Degrees (Invoice No. 90062916)	\$135.12	\$0.00	\$0.00	\$135.12
Bid Item No 85 - Spare Parts - PAPI, Lamp Bulb (Invoice No. 90062916)	\$100.56	\$0.00	\$0.00	\$100.56
Bid Item No 86 - Spare Parts - Replacement Lamp Set for Rotating Beacon (Invoice No. 90062283)	\$126.16	\$0.00	\$0.00	\$126.16
Bid Item No 1-87 - Terminal Building Vault Controls (Invoice No. 55064378)	\$2,711.86	\$0.00	\$0.00	\$2,711.86
Bid Item No 1-63 - Add L-867 Electrical Handhole, Size D, 24" Deep (Invoice No. 90061968, 90062432, 90062916, 90062915)	\$827.79	\$0.00	\$0.00	\$827.79
<b>TOTALS</b>	<b>\$212,010.71</b>	<b>\$0.00</b>	<b>\$20,569.50</b>	<b>\$191,441.21</b>

Prepared by  
 Clapsaddle-Garber Associates, Inc  
 Marshalltown, Iowa

CGA Project No. 4448.06