AGENDA
Committee on Ways and Means
Friday, July 26, 2019 @ 1:30 p.m.
City Council Conference Room, City Hall 10th Floor

Councilmember Spitzley, Chair
Councilmember Spadafore, Vice Chair
Council Member Dunbar, Member

1. Call to Order

2. Approval of Minutes
   - July 12, 2019

3. Public Comment on Agenda Items

4. Discussion/Action:
   A.) RESOLUTION – Grant Acceptance; 2018 Notice of Funding Availability (NOFA)
   B.) RESOLUTION – Grant Acceptance; Fratcher Foundation Perpetual Grant
   C.) RESOLUTION – Application for FY 2019-2020 State of Michigan, Office of Community Corrections Funding & Plan
   D.) Sole Source Purchase: Lansing Police Department request for Transcend Robotics Inc. as the vendor for the purchase of the Vantage F3 Robot
   E.) Sole Source Purchase: Public Service Department, Engineering Division request for C2AE Engineering Services as the vendor for the purchase of Consultant for Scoping, Survey, Hydraulic Modeling and Monitoring of the Culvert and Construction Services for Culvert Replacement
   F.) Sole Source Purchase: Economic, Development and Planning – Parking Services Office request for Traffic and Safety Control Systems Inc. as the vendor for the purchase of TIBA Parking Entry and Exit Management Solutions

5. Other

6. Adjourn
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<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>Purpose for Attending</th>
<th>Email Address</th>
<th>PHONE</th>
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<tbody>
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<td>Resolution</td>
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CALL TO ORDER
The meeting was called to order at 8:44 a.m.

ROLL CALL
Council Member Patricia Spitzley, Chair - excused
Council Member Peter Spadafore, Vice Chairperson
Council Member Kathie Dunbar, Member – arrived at 8:43

OTHERS PRESENT
LaSondra Crenshaw - Administrative Assistant
Eric Brewer - Council Internal Auditor
Joe Abood – Law Department
Lisa Hagen – Representing City Council
Andy Kilpatrick – Public Service Director

Minutes
MOTION BY COUNCIL MEMBER SPADAFORE TO APPROVE THE MINUTES FROM JUNE 14, 2019 AS PRESENTED. MOTION CARRIED 2-0.

Public Comment
No public comment
Discussion/Action

Sole Source Purchase – Public Service Department, Recycling Division request for Stansley – Recycling Waste Services as the vendor for the purchase of Hauling Single Stream Recycling

Mr. Kilpatrick stated the recycler/Hauler the city was using was not meeting expectations, they were within one day of spilling out and Stansley was able to step in. The job went out to bid however, he was not sure how many bids had been received, and Stansley is being used in the interim. This Sole Source is for six weeks to allow time to get bids in.

Council Member Dunbar asked when the contract they previously had was due to expire. Mr. Kilpatrick stated he believed it was a month-to-month contract.

MOTION BY COUNCIL MEMBER SPADAFORE TO RECEIVE AND PLACE ON FILE THE SOLE SOURCE PURCHASE PUBLIC SERVICE DEPARTMENT RECYCLING DIVISION REQUEST FOR STANSLEY – RECYCLING WASTE SERVICES AS THE VENDOR FOR THE PURCHASE OF HAULING SINGLE STREAM RECYCLING. MOTION CARRIED 2-0

Sole Source Purchase – Public Service Department, Wastewater Division request for Kennedy Industries as the vendor for the purchase of the Flygt Pump Replacement for Willard Pump Station

Mr. Kilpatrick stated that only certain types of pumps would work, they tested several pumps however; this one works best and they are familiar with this one.

MOTION BY COUNCIL MEMBER SPADAFORE TO RECEIVE AND PLACE ON FILE THE SOLE SOURCE PURCHASE PUBLIC SERVICE DEPARTMENT WASTEWATER DIVISION REQUEST FOR KENNEDY INDUSTRIES AS THE VENDOR FOR THE PURCHASE OF THE FLYGT PUMP REPLACEMENT FOR WILLIARD PUMP STATION. MOTION CARRIED 2-0

Sole Source Purchase – Public Service Department, Wastewater Division request for Collcorp Inc. Ironbrook as the vendor for the purchase of UV Disinfection System Lamps and Parts

Mr. Kilpatrick stated they tried other vendors but those bulbs did not perform the way this vendor has in the past so they switched back.

MOTION BY COUNCIL MEMBER SPADAFORE TO RECEIVE AND PLACE ON FILE THE SOLE SOURCE PURCHASE PUBLIC SERVICE DEPARTMENT WASTEWATER DIVISION REQUEST FOR COLLCORP INC. IRONBROOK AS THE VENDOR FOR THE PURCHASE OF UV DISINFECTION SYSTEM LAMPS AND PARTS. MOTION CARRIED 2-0

OTHER

No other topics of discussion

ADJOURN

Adjourn at 8:50 a.m.

Submitted by,
LaSondra Crenshaw, Administrative Assistant
Lansing City Council
Approved by the Committee on________________
LANSING CITY COUNCIL

GRANT INFORMATION FORM

(Required for all grant applications and acceptances)

REFERRAL DATE: 7/2/2019

GRANT NAME: 2018 HUD Continuum of Care Competitive Grant – Housing and Service Programs

DEPARTMENT: Human Relations and Community Services

CONTACT PERSON (INCLUDE EMAIL AND PHONE): Dr Joan Jackson Johnson jjjohnson@lansingmi.gov 517 482-4477

APPLICATION DATE: 8/18/18 AWARD DATE: March 2019 general announcement

GRANT CYCLE: __various dates__ Check One: ___X___ Annual ___One-Time

FUND AMOUNT: $2,551,336 (Breakdown below should total this amount)

GOODS & SERVICES (see attached list)

PERSONNEL

CONSTRUCTION $0.00

LAND $0.00

OTHER (Training)

CITY MATCH (IF APPLICABLE): $28,237

GRANT PAYS FOR: Cumulatively twelve grants for local homeless housing and service programs.

FUND ALLOCATIONS (Please describe the purpose of the grant and allowable uses):

Continuum of Care (CoC) grants will help end homelessness and provide critically needed support to local programs on the front lines of serving individuals and families experiencing homelessness.
RESOLUTION #____
BY THE COMMITTEE OF THE WHOLE
RESOLVED BY THE CITY COUNCIL OF THE CITY OF LANSING

WHEREAS, the Department of Human Relations and Community Services (HRCS) as the Collaborative Applicant for the Continuum of Care for the Lansing, East Lansing, Ingham County area, will be receiving renewal grants from the Department of Housing and Urban Development (HUD) under the 2018 Continuum of Care Homeless Assistance Programs Notice of Funding Availability (NOFA) application; and

WHEREAS, these renewal grants will help fund programs for at least the following agencies: Advent House Ministries, Child and Family Charities - Gateway Division, Mid-Michigan Recovery Services, Lansing Housing Commission, Holy Cross Services, One Church One Family, and the HRCSD (HMIS and Planning funds), for a one-year period to support existing Continuum of Care initiatives; and

WHEREAS, the HRCS Department is to receive from HUD an amount up to $2,551,336; and

WHEREAS, each agency shall be responsible for securing the required cash or in-kind match requirements stipulated by HUD in receiving said grants, while HRCS will continue to be responsible for securing a 25% cash and/or in-kind match for the HMIS and Planning grants;

NOW, THEREFORE, BE IT RESOLVED the City of Lansing, Michigan, accepts the terms of the grant application as stipulated by HUD and the City of Lansing does hereby specifically agree, but not by way of limitation, as follows:

1. That the administration is authorized to create appropriate accounts and transfer necessary funds to administer and monitor the grants and to appropriate such additional funds as shall be necessary to complete the project subject to the City Council transfer policies.

2. To maintain satisfactory financial accounts, documents, and records to make them available to HUD for auditing at reasonable times.

3. To implement the project and provide such funds, services, and materials as may be necessary to satisfy the terms of said Agreements.

4. To authorize the Mayor of the City of Lansing to be the local authorized representative to sign documents in behalf of the City of Lansing.

5. To comply with any and all terms of said HUD agreements, including all terms not specifically set forth in the foregoing portion of this resolution.
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$2,551,336
LANSING CITY COUNCIL

GRANT INFORMATION FORM

(Required for all grant applications and acceptances)

REFERRAL DATE: July 22, 2019

GRANT NAME: Fratcher Foundation Perpetual Grant

DEPARTMENT: Department of Parks and Recreation

CONTACT PERSON (INCLUDE EMAIL AND PHONE): Brett Kaschinske, Director 483-4042; brett.kaschinske@lansingmi.gov

APPLICATION DATE AWARD DATE:

GRANT CYCLE: Perpetuity Check One: X Annual ___One-Time

FUND AMOUNT: $54,528.50 (Breakdown below should total this amount)

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CITY MATCH (IF APPLICABLE): N/A

GRANT PAYS FOR: Projects within Mt. Hope Cemetery and Fratcher Memorial Garden

FUND ALLOCATIONS (Please describe the purpose of the grant and allowable uses):

The City of Lansing is a beneficiary of the Fratcher Foundation under the following Trust provisions “Care of Mount Hope Cemetery. Foundation, in Trustee’s discretion may use Trust income to fulfill Foundation’s primary charitable purpose to plant flowers and otherwise beautify Mount Hope Cemetery, Lansing, Michigan.
BY THE COMMITTEE ON
RESOLVED BY THE CITY COUNCIL OF THE CITY OF LANSING
RESOLUTION #

WHEREAS, on September 15, 2004 National City Bank of the Midwest (formerly First of America Bank – Central) was appointed Trustee of the Charles W. Fratcher Irrevocable Trust (The Trust); and

WHEREAS, PNC Bank is the successor to National City Bank of the Midwest and is now the Trustee; and

WHEREAS, the Trust property is known as Fratcher Foundation; and

WHEREAS, the City of Lansing is a beneficiary of the Fratcher Foundation under the following Trust provisions “Care of Mount Hope Cemetery. Foundation, in Trustee’s discretion may use Trust income to fulfill Foundation’s primary charitable purpose to plant flowers and otherwise beautify Mount Hope Cemetery, Lansing, Michigan, in memory of Charles L. Fratcher, Dot Lora Fratcher, Rena M.B. Wilson. Foundation income shall not be used for general maintenance of Mount Hope Cemetery, as the City of Lansing, or its appropriate board, maintains other cemeteries under its control. Foundation income shall be used to enhance the beauty and utility of Mount Hope Cemetery in ways which will not or cannot be done by the City of Lansing. Trustee shall use accumulated income as the first funds expended in the subsequent year or years”; and

WHEREAS, to receive distribution from the Trust, the Trustee has requested that the City of Lansing submit a grant request and letter of proposal that includes an outline of the specific amount requested and how the funds will be utilized; and

WHEREAS, upon receipt of Fratcher Foundations funds, the City intends to place the distribution received in a grant revenue account and appropriate the funds to an expense account; and

NOW, THEREFORE, BE IT RESOLVED that the City Council approves the acceptance of the Fratcher Foundation donations and authorizes the Parks and Recreation Department to provide the Trustee with an appropriate grant request and letter of proposal each year; and

BE IT FINALLY RESOLVED, that, upon receipt of a Fratcher Foundation donation, the Finance Department is authorized to create appropriate accounts and to make the necessary appropriations and transfers for the expenditure and control of the funds.

Approved for Placement on
City Council Agenda:

City Attorney
Date:
July 10, 2019

Chris Swope
City Clerk
9th Floor
124 W. Michigan Ave.
Lansing, MI 48933

Dear Mr. Swope,

On behalf of the Ingham County/City of Lansing Community Corrections Advisory Board (CCAB), I respectfully request that Lansing City Council approve the FY 2019-2020 State of Michigan - Office of Community Corrections Funding Application by August 22, 2019. This application provides State funding for administration, community treatment and services programming and community residential facility treatment services for the local offender population.

The Application was approved by the Ingham County Board of Commissioners on June 11, 2019. I have included a copy of Resolution #18-264 in Word format for your reference.

Thank you.

Mary Sabaj, J.D.
CCAB Manager
ADOPTED – JUNE 11, 2019
AGENDA ITEM NO. 19

Introduced by the Law & Courts and Finance Committees of the:

INGHAM COUNTY BOARD OF COMMISSIONERS

RESOLUTION TO AUTHORIZE SUBMISSION OF A GRANT APPLICATION AND ENTERING INTO A CONTRACT WITH THE MICHIGAN DEPARTMENT OF CORRECTIONS FOR INGHAM COUNTY/CITY OF LANSING COMMUNITY CORRECTIONS AND ENTERING INTO PROGRAM SUBCONTRACTS FOR FY 2019-2020

RESOLUTION # 19 – 268

WHEREAS, the State Community Corrections Advisory Board, the Ingham County Board of Commissioners, and the City of Lansing approved the original Ingham County/City of Lansing Community Corrections Comprehensive Plan in 1991; and

WHEREAS, the State Community Corrections Advisory Board approved the Funding Application and Plan for FY 2019-2020; and

WHEREAS, the FY 2019-2020 Application provides for the following CCAB Plans and Services programming: Relapse Prevention and Recovery ($67,898) to be provided by CEI CMH; Gatekeeper services ($4,069) to be provided by the CCAB Staff Consultant; MRT Cognitive Change Groups ($26,082) to be provided by Prevention and Training Services; Domestic Violence Intervention Groups ($12,000) to be provided by Prevention and Training Services; Opioid Specific Program services ($55,000) to be provided by Tri County Community Adjudication Program; Day Reporting services ($40,274) to be provided by Northwest Initiative – ARRO; and, Electronic Monitoring Services for Pretrial defendants ($10,134) to be provided by Sentinel, Inc., for a subcontracted program total of $215,457 for the time period of October 1, 2019 through September 30, 2020; and

WHEREAS, the FY 2019-2020 Application also provides funding for a special part-time Pretrial Services Investigator ($25,683) to enhance the community supervision capacity of 30th Circuit Court Pretrial Services and for CCAB Administration in the amount of $50,422 for a Plans and Services total of $291,562 for the time period of October 1, 2019 through September 30, 2020; and

WHEREAS, Ingham County is also provided with availability of a projected average daily population of 30 residential beds and with M.D.O.C. in the amount of $531,075 and 1.23 beds per day funded with Drunk Driver Jail Reduction – Community Treatment Program (DDJR-CTP) grant funds in the amount of $21,169 contracting directly with residential providers rather than with local jurisdictions for a projected total value of $552,244; and
WHEREAS, pursuant to the FY 2019-2020 Application, the County may enter into subcontracts for the purpose of implementing Plans and Services programs and services identified in the Community Corrections Plan and Application; and

WHEREAS, the Subcontractors for Plans and Services programming are willing and able to provide the services that the County requires.

THEREFORE BE IT RESOLVED, that the Ingham County Board of Commissioners authorizes entering into an Agreement with the Michigan Department of Corrections for Ingham County/City of Lansing Community Corrections for FY 2019-2020 in the amount of $291,562 in CCAB Plans and Services and Administration Corrections funds for the time period of October 1, 2019 through September 30, 2020.

BE IT FURTHER RESOLVED, that the Ingham County Board of Commissioners authorizes entering into subcontracts for CCAB Plans and Services programming from October 1, 2019 through September 30, 2020 with Prevention and Training Services for the cost of MRT Change Groups for a cost not to exceed $26,082; with Prevention and Training Services for the cost of Domestic Violence Intervention Groups for a cost not to exceed $12,000; with Tri County Community Adjudication Program for the cost of Opioid Specific Program services not to exceed $55,000; with CEI Community Mental Health for the actual cost of Relapse Prevention and Recovery services not to exceed $67,898; with Northwest Initiative - ARRO for the actual cost of Day Reporting services not to exceed $40,274; and with Sentinel, Inc. for the actual cost of electronic monitoring services for Pretrial defendants not to exceed $10,134.

BE IT FURTHER RESOLVED, that the Ingham County Board of Commissioners authorizes the continued funding of a special part-time (19 hours per week) Pretrial Services Investigator position at the ICEA PRO06 salary grade not to exceed $25,683.

BE IT FURTHER RESOLVED, that entering into the subcontracts and maintaining the Pretrial Services Investigator position are contingent upon entering into the Agreement with the State.

BE IT FURTHER RESOLVED, that the subcontracts and Pretrial Services Investigator position are contingent throughout the subcontract period on the availability of grant funds from the State of Michigan for these purposes.

BE IT FURTHER RESOLVED, that the Board Chairperson is authorized to sign any necessary contracts/subcontracts consistent with this resolution subject to approval as to form by the County Attorney.

**LAW & COURTS: Yeas:** Slaughter, Celentino, Creshaw, Polsdover, Trubac  
**Nays:** None  
**Absent:** Koenig, Schafer  
**Approved 05/30/2019**

**FINANCE: Yeas:** Grebner, Morgan, Tennis, Creshaw, Polsdover, Schafer, Maiville  
**Nays:** None  
**Absent:** None  
**Approved 06/05/2019**
CITY of LANSING
INTEROFFICE COMMUNICATION

TO: Andy Schor, Mayor

FROM: Stephanie Robinson CPPB, Senior Buyer

DATE: July 18, 2019

SUBJECT: Sole Source Purchase – Transcend Robotics Inc.

Please include this Sole Source packet of information in your transmittal to Council as required by the Purchasing Ordinance Section 206.05.

In summary, the Purchasing Office processed the following Sole Source transaction:

Department: Lansing Police Department
Vendor: Transcend Robotics Inc.
Item Purchased: Vantage F3 Robot
Dollar Amount: $19,250.00

Additional information pertaining to this purchase is attached for your information.

This letter is filed in accordance with the Purchasing Ordinance Section 206.05 (a) and (b).

slr
TO: Andy Schor, Mayor
Samantha Harkins, Chief of Staff

FROM: Stephanie Robinson, CPPB, Senior Buyer

DATE: July 9, 2019

SUBJECT: Sole Source – Transcend Tactical - Vantage F3 Robot

The Lansing Police Department START Division requests that Transcend Tactical be designated as a Sole Source vendor for the purchase of the Transcend Vantage F3 Robot.

Please see the attached letter from Sgt. Kevin Schlagel and Chief Mike Yankowski regarding the request.

Based on the attached letter we recommend issuing a sole source purchase order to Transcend Tactical, in the amount of $19,250.00 per the request of the Police Department START Division.

Attachment

Date: 7-9-19

Approved ☑ Denied ___

Andy Schor, Mayor
TO: Andy Schor, Mayor
    Samantha Harkins, Chief of Staff

FROM: Stephanie Robinson, CPPB, Senior Buyer

DATE: July 9, 2019

SUBJECT: Sole Source – Transcend Tactical - Vantage F3 Robot

The Lansing Police Department START Division requests that Transcend Tactical be designated as a Sole Source vendor for the purchase of the Transcend Vantage F3 Robot.

Please see the attached letter from Sgt. Kevin Schlagel and Chief Mike Yankowski regarding the request.

Based on the attached letter we recommend issuing a sole source purchase order to Transcend Tactical, in the amount of $19,250.00 per the request of the Police Department START Division.

Attachment

Date: _______________

Approved______ Denied ______

_____________________
Andy Schor, Mayor
To: Stephanie Robinson, Purchasing Department, Senior Buyer  
From: Mike Yankowski, Chief of Police  
Subject: Sole Source Request START Robot  
Date: July 2nd 2019

Over the past several years S.T.A.R.T. has been trying to find a new robot. Numerous vendors were reached out too, but we were only able to find one robot that meet all our needs and that is Transcend Robotics. The robot is a Transcend Vantage F3

The robot selected needs to climb stairs, have thermal and IR remote camera capabilities, be able to deliver flameless OC/CS gas and have a signal booster to increase the deployment range of the unit.

The Transcend Robot unique features include:

  ARTI Technology which requires automatic stair climbing capabilities.

  This technology eliminates human error while negotiating stairs.

All other robots use manual stair climbing technology.

I am requesting a sole source purchase request for $19,250.00 for the above listed equipment. The account number that the purchase will come from is 1013240.97700.

Thank you for your assistance with this matter.

Mike Yankowski, Chief of Police.

"Capital City's Finest"
# CITY OF LANSING
124 W. Michigan Ave
Lansing, MI 48933
(517) 483-4128

TO: TRANSCEND ROBOTICS INC
114 SOUTH BUCKEYE ST
KOKOMO, IN 46901

---

## PURCHASE ORDER

- **P.O. NUMBER**: P086081
- **DATE**: 07/10/19
- **VENDOR I.D.**: V037751
- **DELIVERY DATE**: 
- **FOB**: 
- **REQUISITION NO.**: P014535

*Our purchase order number must appear on all invoices, packing list, and correspondence.*

---

# DELIVER ITEMS TO:

**LANSONG POLICE - FIREARMS RANGE**
16001 AIRPORT RD
LANSONG, MI 48906

---

# SEND INVOICE TO:

**LANSONG POLICE - FIREARMS RANGE**
120 W MICHIGAN AVE 4TH FL
LANSONG, MI 48933

---

## ITEM | DESCRIPTION | QTY | UNIT | UNIT PRICE | EXTENSION |
--- | --- | --- | --- | --- | --- |
001 | VANTAGE P3 ROBOT x 1, CONTROLLER UNIT x 1, CONTROLLER & TRANSPORT CASE x 1, ROBOT BATTERY x 3, SMALL BATTERY x 4, CHARGERS x 3, BACKPACK x 1, BOOSTER & HI GAIN ANTENNA x 1 | 1 | EA | 19,000.00 | 19,000.00 |
002 | SHIPPING COST | 1 | EA | 250.00 | 250.00 |

---

| TAX | 0.00 |
--- | --- |

**TOTAL**: 19,250.00

---

**THE ARTICLES SPECIFIED ARE SUBJECT TO THE FOLLOWING CONDITIONS:**

1. Goods other than those specified on this order must not be substituted or prices changed without authorization.
2. If the quantity shipped is short of the purchase order quantity, specify on the packing slip if that quantity is on back order or cancelled.

---

Federal Tax ID: 38-6004628

**AUTHORIZED SIGNATURE**

---
To the Whom It May Concern,

This letter is to confirm that the ARTI VANTAGE is a patented/sole source product from Transcend Robotics, Inc.

This product is based on Transcend’s mobile technology by the name of “Mobile reconnaissance apparatus with articulating traction control” as described in Transcend’s U.S. patents numbered US8434576 and US8893832 (the “ARTI Technology”).

No other entities sell the ARTI VANTAGE.

Sincerely,

[Signature]

Phillip Walker
February 5, 2019
Bill To:
Lansing PD MI
120 W E Michigan Ave
Lansing, MI

Ship To:
Same as billing

TRANSCEND TACTICAL
DUNS NO. 079986561
FEIN: 47-2138026

Payable To: Transcend Robotics Inc.
50% DUE BEFORE SHIPMENT. 50% DUE NET: 30 DAYS FROM DELIVERY.

Send Physical Check To:
Transcend Robotics Inc.
Attn: Transcend Robotics Accounts Receivables
510 17TH STREET
Huntington, CA 92648

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<td>$9,625.00</td>
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</table>

THIS INVOICE IS FOR 50% OF PO# PO-86081. IT IS DUE NO LATER THAN 5 PM EST ON 07/25/2019. Thank you.

Balance Due $9,625.00
Transcend Robotics, Inc. will accept returns of items purchased with an approved Return Merchandize Authorization within 14 days from the date of receipt of the robot, provided the item is returned in the same condition it was received. A full refund will be credited to the customer. The customer is responsible for all shipping charges to return products and will ensure the shipment is fully insured in case of damage during shipment. All remaining payments are due net 30 days from date of delivery. All custom orders are final and will not be subject to this return policy. There's a 2% of total invoice value fee for invoices that are late. An additional 1% fee of the total invoice value will be added for each 30-days the payment is late.

- All sales are final on custom orders and inventory liquidations.

- Please reference Transcend's Warranty and Customer Agreement for a detailed description of Transcend's Warranty.

- No license is required to purchase, however an amateur radio license is required to operate.

- Most orders ship net 60 days from purchase unless expedited for a fee.

- Warranties and repairs are coordinated by Transcend and owned/serviced by AndyMark, Inc.

- Disclaimer: Please reference Transcend's Warranty and Customer Agreement for a description of Transcend's limitations of liabilities.
**Bill To:**
Lansing PD Mi
120 W E Michigan Ave
Lansing, MI

**Ship To:**
Same as billing

---

**TRANSCEND TACTICAL**
DUNS NO. 079985561
FEIN: 47-2138026
Payable To: Transcend Robotics Inc.
FULL PAYMENT DUE NET 2-DAYS FROM RECEIPT OF INVOICE.

**Send Physical Check To:**
Transcend Robotics Inc.
Attn: Transcend Robotics Accounts Receivables
510 17TH STREET
Huntington, CA 92648

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<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit Cost</th>
<th>Quantity</th>
<th>Line Total</th>
</tr>
</thead>
</table>
| **VANTAGE Fully Loaded** | - VANTAGE F3 Robot x 1  
- Controller Unit x 1  
- Controller & Accessory Transport Case x 1  
- Robot Battery x 3  
- Small Battery x 4  
- Chargers x 3  
- Backpack x 1  
- Booster & High Gain Antenna x 1 | $19,000.00  | 1        | $19,000.00 |

**Shipping**  
$250.00  
1  
$250.00

**Subtotal**  
$19,250.00

---

**Balance Due**  
$19,250.00
• Transcend Robotics, Inc. will accept returns of items purchased with an approved Return Merchandize Authorization within 14 days from the date of receipt of the robot, provided the item is returned in the same condition it was received. A full refund will be credited to the customer. The customer is responsible for all shipping charges to return products and will ensure the shipment is fully insured in case of damage during shipment. All remaining payments are due net 30 days from date of delivery. All custom orders are final and will not be subject to this return policy. There’s a 2% of total invoice value fee for invoices that are late. An additional 1% fee of the total invoice value will be added for each 30-days the payment is late.

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• Warranties and repairs are coordinated by Transcend and owned/serviced by AndyMark, Inc.

• Disclaimer: Please reference Transcend's Warranty and Customer Agreement for a description of Transcend's limitations of liabilities.
Transcend Tactical Vantage™
Terms, Conditions and Warranty Information

Limited Warranty
In exchange for monies tendered and upon the execution of this Agreement by Customer, Transcend Robotics, Inc., DBA Transcend Tactical, ("Transcend") warrants its Vantage™ robot and related accessories (Products) to be free of defects in material and workmanship for one year from the date of delivery to Customer. Customer must report any claimed defect by phone at 510.338.3027, or by email at support@transcendtactical.com. Transcend, in consultation with AndyMark, Inc. (the manufacturing partner) will determine whether such repairs can be performed by parts supplied by manufacturer at no cost to the Customer or whether the Vantage robot will need to be returned to the manufacturer for repair or replacement at manufacturer’s sole discretion. Replacement may be made with a robot in a similar or better state of use. If a return for repair is determined necessary, the customer will be responsible for shipping costs to the manufacturer and manufacturer will be responsible for return shipping costs. Each party will ensure that the shipment is fully insured in case of damage during shipment.

Warrant Exclusions/Limitations
Transcend is not liable under the warranty set forth above to the extent a defect or failure is caused by: (i) repair, alteration or modification of the Products by persons other than Transcend or its designee without Transcend’s prior approval, (ii) use beyond the intended design or normal operating hours, or damage or defects caused by negligence, accident, abuse, misuse, improper or other abnormal usage, (iii) normal wear and tear; or (iv) Customer’s failure to properly store, install, operate or maintain the Products in accordance with good industry practices or the recommendations or instructions of Transcend.

TRANSCEND MAKES NO OTHER WARRANTY OF ANY KIND WITH RESPECT TO THE PRODUCTS. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY AGAINST INFRINGEMENT AND THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED.

Limitation of Liability
Transcend shall in no event be liable for any consequential, incidental, indirect, special or punitive damages arising out of this Agreement, or out of any breach of its obligations hereunder, or out of any defect in, or failure of, or malfunction of the Products, including but not limited to, claims based upon personal injury or death, loss of use, lost profits or revenue, interest, lost goodwill, work stoppage, impairment of other equipment, environmental damage, loss by reasons of shutdown or non-operation, increased expenses of operations, cost of purchase of replacement equipment or claims of Customer or any other party for service interruption whether or not such loss or damage is based on contract, tort (including negligence and strict liability) or otherwise.
Further, except with respect to the limited warranty provided herein, Customer agrees Transcend will not be liable to Customer, its affiliates, employees, investors, partners, officers, directors and agents ("Customer Entities") or any third party under this Agreement for any liability, loss, damage, expense, or cost ("Loss") resulting from or arising out of personal injury or death of any person as a result of any Customer Entity’s or third party’s use of the VANTAGE ROBOT or accessories; provided, however, the foregoing shall not apply in the event any such Loss was a direct result of Transcend’s gross negligence or willful misconduct.

In no event will Customer’s cumulative, aggregate liability to the Customer Entities under this Agreement exceed the total amount paid by Customer to Transcend for the Products purchased hereunder.

Returns
Transcend Robotics, Inc. will accept returns of items purchased with an approved Return Merchandise Authorization within 14 days from the date of receipt of the robot, provided the item is returned in the same condition it was received. A refund will be credited to the customer. The customer is responsible for all shipping charges to return products and will ensure the shipment is fully insured in case of damage during shipment. All remaining payments are due net 30 days from date of delivery.

Radio License Requirement
No radio license is required to purchase the Vantage robot, however, a radio license is required to operate the VANTAGE robot per FCC guidelines. It is the customer's responsibility to comply with FCC requirements.

Agreed and Accepted

Transcend Tactical

Customer

Phillip Walker
Printed Name

CEO
Title

Authorized Signature

07/27/2018

Organization Name

Printed Name

Title

Authorized Signature
Returns & Warranty

- Transcend Robotics, Inc. will accept returns of items purchased with an approved Return Merchandize Authorization within 14 days from the date of receipt of the robot, provided the item is returned in the same condition it was received. A full refund will be credited to the customer. The customer is responsible for all shipping charges to return products and will ensure the shipment is fully insured in case of damage during shipment. All remaining payments are due net 30 days from date of delivery. All custom orders are final and will not be subject to this return policy. There’s a 2% of total invoice value fee for invoices that are late. An additional 1% fee of the total invoice value will be added for each 30-days the payment is late.

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CITY of LANSING
INTEROFFICE COMMUNICATION

TO: Andy Schor, Mayor
FROM: Stephanie Robinson CPPB, Senior Buyer
DATE: July 18, 2019
SUBJECT: Sole Source Purchase – C2AE Engineering Services

Please include this Sole Source packet of information in your transmittal to Council as required by the Purchasing Ordinance Section 206.05.

In summary, the Purchasing Office processed the following Sole Source transaction:

Department: Public Service Department, Engineering Division
Vendor: C2AE
Item Purchased: Consultant for Scoping, Survey, Hydraulic Modeling and Monitoring of the Culvert and Construction Services for Culvert Replacement

Dollar Amount: $ 69,878.64 from Storm Sewer Repair & Maintenance account 101.453615.746000.0

Additional information pertaining to this purchase is attached for your information.

This letter is filed in accordance with the Purchasing Ordinance Section 206.05 (a) and (b).

slr
TO: Andy Schor, Mayor
     Samantha Harkins, Deputy Mayor
FROM: Stephanie Robinson, CPPB Buyer
DATE: July 17, 2019
SUBJECT: Sole Source Purchase – C2AE Engineering Services

The Public Service Department Engineering requests that C2AE be designated as a sole source consultant for scoping, survey, hydraulic modeling and monitoring of the culvert and follow up engineering for construction services for the Miller Rd Culvert Replacement.

Please see the attached letter and approval from Ann Parry and Andrew Kilpatrick.

Based on the attached letter we recommend issuing a sole source purchase order to C2AE in the amount of $69,878.64 from the Storm Sewer Repair & Maintenance account 101.453615.746000.0.

Attachment

Date 7-17-19

Approved ☑ Denied

Andy Schor, Mayor
To: Stephanie Robinson, Purchasing
From: Ann Parry, Project Engineer
Date: July 8, 2019
Subject: Professional Sole Source Approval

The Public Service Department discovered in April of 2019 that the existing 107" X 171" Pipe Arch culvert for the Pawlowski Drain located on Miller Road just east of Executive Drive is failing. The failure was discovered when it presented itself as a sink hole in the pavement on Miller Road. The City has a road project in this location currently under construction, and hired C2AE, the firm working on the project, to scope the failure to determine whether to fix or replace the culvert. C2AE recommended that the culvert be replaced.

The City requested and received (attached) a proposal from C2AE for scoping the culvert replacement and providing base maps and hydraulic modeling needed to obtain a permit from the State (ELGE) for the culvert replacement. Monitoring the existing culvert condition on a regular basis is also included, to determine if the condition worsens and presents imminent danger. Design and Construction services will be added later once replacement is specified and schedule is determined.

We request approval to hire C2AE, on a sole source basis, to perform scoping, survey, hydraulic modeling and monitoring of the condition of the culvert and later engineering services for the construction phase.

The not-to-exceed cost of the proposed work is $69,878.64. We have reviewed the cost and find it to be reasonable for this type of work. Funds are available in account # 101.453615.746000.0000 Storm Sewer Repair & Maintenance.

Approved
Dean Johnson, City Engineer
7/10/19

Approved
Andy Kilpatrick, Public Service Director
7/10/19
# PURCHASE ORDER

**P.O. NUMBER**  
P086098

**DATE**  
07/18/19

**VENDOR I.D.**  
V005254

**DELIVERY DATE**  

**FOB**  

**REQUISITION NO.**  
P8014553

Our purchase order number must appear on all invoices, packing list and correspondence.

---

**TO:**  
C2AE INC  
106 W ALLEGAN STE 500  
LANSONG, MI 48933

**PHONE#**  
(517) 371-2013  
**FAX#**  
(517) 371-2013

---

**DELIVER ITEMS TO:**  
PUBLIC SERVICE DEPARTMENT ENGINEERING  
124 W MICHIGAN AVENUE 7TH FL  
LANSONG, MI 48933

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**SEND INVOICE TO:**  
PUBLIC SERVICE DEPARTMENT ENGINEERING  
124 W MICHIGAN AVENUE 7TH FL  
LANSONG, MI 48933

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<td>LS</td>
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---

**TAX**  
0.00

**TOTAL**  
69,878.64

---

THE ARTICLES SPECIFIED ARE SUBJECT TO THE FOLLOWING CONDITIONS:

1. Goods other than those specified on this order must not be substituted or prices changed without authorization.
2. If the quantity shipped is short of the purchase order quantity, specify on the packing slip if that quantity is on back order or cancelled.

Federal Tax ID: 38-6004628  

AUTHORIZED SIGNATURE [Signature]
June 26, 2019

Mr. Dean Johnson, PE
City Engineer
City of Lansing
124 West Michigan Avenue
Lansing, MI 48933

Re: Proposal for Engineering Services for Miller Road Culvert Replacement

Dear Mr. Johnson,

C2AE is grateful for the opportunity to provide our Team’s proposal for your consideration the Miller Road Culvert Replacement Project. We will utilize our past experience from our initial investigations to complete the scoping work. We realize this project is time-sensitive and that it must be coordinated with the Miller Road paving project that we are leading construction services on this summer.

Al Kaltenthaler, PE, SE will be the Project Manager/primary contact and will bring value to the project with his years of experience in structural design, bridge, and stream crossings. As the scoping progresses, we will keep you and Ann Parry involved to gain your valuable input into the final product. Our proposal includes an Understanding of the Problem, Method of Approach, Work Plan and corresponding hours/fees.

Please do not hesitate to contact us should you have any questions or concerns regarding our submittal, or if you need additional information.

Sincerely,

C2AE

William J. Kimble, PE
President, Government Leader

Al Kaltenthaler, PE, SE
Project Manager
UNDERSTANDING OF THE PROBLEM

The City of Lansing seeks to hire a qualified professional engineering team to provide scoping/conceptual level design, updated costs based on conceptual level design, design survey, geotechnical investigation, hydraulic modeling and analysis, develop base plans, and assist with EGLE permitting, for replacement of the Miller Road over Pawlowski Creek (Mud Lake Drain and Alton Drain are also names for this stream) Culvert in South Lansing. In addition, the firm will provide weekly measurements of the existing structure at both ends and at the weakened area to monitor any movement.

Background
The existing pipe arch culvert was constructed in 1971 and is constructed of corrugated metal pipe. Dimensions of the culvert are 107” tall and 171” wide with a length of 110’.

The culvert has deteriorated and failed in one area. Failure includes upward heaving in the floor of the culvert and a caved in area in the top of the culvert (see arrow in photo at right). The amount of deterioration varies from completely through one 10’ long area to no noticeable corrosion. Approximately 73% of the length of the culvert has corrosion holes in the bottom.

A sinkhole was observed in early May and the City then asked us to investigate further.

CZAE was called to perform field investigation for this and has been out to the site three times in May of 2019 to observe, measure, and report back to Lansing.

Field measurements for the last few weeks indicates that there has been no change to the measurements for the culvert indicating that there is no additional movement or deflection at this time.

The existing culvert has a sanitary sewer running beneath it and two LBWL water main pipes running through it a few feet from the top of the culvert. Discussion with the City and LBWL indicates that the two water main pipes will be removed and placed beneath the new culvert or structure, which is anticipated to occur with this project.

Communication with LBWL indicates that they desire CZAE to redesign the new water mains to go below the new culvert.

The project will be designed in accordance with the current American Association of State Highway and Transportation Officials (AASHTO) Bridge Design Specifications, A Policy on Geometric Design of Highways and Streets (Green Book), Roadside Design Guide, MDOT Bridge Design Manual and Bridge Design Guides, MDOT Road Design Guide, MDOT Local Agency Program (LAP) Guidelines and City of Lansing design requirements.

We anticipate the following steps for successful completion of the project:

- Report on range of culvert alternatives and consider bridge alternative and provide recommendation. This was done in a document sent to the City on May 23, 2019.
- Develop clear scope of work for replacement culvert.
- Provide constructability assessment within available schedule considering environmental constraints.
- Obtain flows for the stream and perform hydraulic analysis for existing and proposed conditions.
- EGLE coordination for hydraulic analysis.
- Assist City of Lansing to secure all required permits.
- Evaluate and design scour countermeasures for new structure.
- Coordinate with City of Lansing, LBWL, and other utilities and stakeholders.
- Evaluate feasibility for relocating outlet for Boulter Drain.
UNDERSTANDING OF THE PROBLEM

- Evaluate impacts of lowering LBWL water mains beneath culvert and articulate limits of work to minimize repaving on Miller Road.
- Evaluate feasibility of part-width construction on Miller Road, if possible.
- Address bypass pumping needs.
- Obtain Topographic Survey including select parcels for right of way, if necessary.
- Obtain Geotechnical information and provide foundation recommendations for proposed structure.
- Address and mitigate potential environmental issues including noise ordinances, Pawlowski Creek floodplain, Indiana Bat, Long eared bat habitat, Rattlesnake—follow NEPA guidelines.
- Develop constructability issues/risks and mitigate during development of plans and specifications.
- Ensure new structure is designed for design live and dead loads considering shallow cover.
- Develop and submit updated concept report including work items with structure recommendation and program level cost.
METHOD OF APPROACH

Kickoff Meeting
C2AE starts every project with a design team Kickoff Meeting, where the Project Manager leads the team to review the client's goals and objectives, the scope of work, schedule and milestones, budget, project stakeholders, team organization/resources/responsibilities, project file structure, the QA/QC Plan and schedule, the communication plan, and the potential risk plan. This meeting brings each team member to common understanding at the very beginning of the project; minimizing rework and going backwards. It is our desire to have a combined Kickoff Meeting for this project with the City of Lansing design staff and C2AE design staff.

WORK PLAN
Our detailed approach to key design elements is outlined below.

Task I - Scoping (Miller Road Culvert Replacement)

This task is to document the requirements for the replacement structure type, relocations of two existing water mains, assess ROW impacts, assess existing retaining walls, NEPA evaluation, pavement design, constructability, and access considerations. The Boulter Drain outlet will not be included with this project as discussed with the City on June 19, 2019.

C2AE has evaluated multiple alternatives for the culvert replacement: structural lining of the existing culvert, concrete and steel replacement alternates, and single span bridge. This assessment will include environmental considerations. The results of the analysis will be a somewhat more detailed and expanded version of the memo we sent to the City on 5/23/19.

From our recent meeting with the City, we will also ensure that the proposed layout of the new structure allows for placement of sidewalk on the north side of Miller Road.

Structure Considerations
The existing culvert has failed and the hydraulic opening has been compromised. It is unlikely that a structural lining option will be considered very seriously as we expect to need to provide at least as much hydraulic opening as was originally provided if not more depending on actual flows for the new culvert.

Steel, aluminum and concrete culvert options have been investigated and will be elaborated on as part of this scoping effort.

A single span bridge has been considered, but piles are likely required due to the flashy nature of the flows and scour potential which will drive up the cost. Potential superstructure types are Press-brake-formed steel tub girders (PBFSTG) and spread box beams.

Speed of fabrication and ease of installation will be considered as well as relative cost.

Maintaining Traffic
We will look at maintaining traffic options for vehicles and pedestrians, but expect full road closure to be the most suitable for a quick and safe project. With the stream flow mitigated by bypass pumping pipes being above grade, it is expected that part-width will not be advisable.

We will develop CPM schedules for design and construction for the recommended concept.

Utilities
Existing utilities along Miller Road in this area include: sanitary sewer beneath the culvert, one 24" diameter water main that penetrates the culvert, one 16" diameter water main that penetrates the culvert, gas line on the south side of the street, storm sewers on both sides of the street, Boulter Drain outlet, numerous overhead lines on the north side of the street, and street lighting.

From field investigation we see indications of buried telephone and fiber optic lines also.

C2AE will identify any potential utility conflicts and coordinate relocations with the City and utility companies as needed.
METHOD OF APPROACH

Task II - Topographic Survey, Base Maps, and Concept Design

C2AE will develop Base Maps in AutoCAD format from the survey, field investigations, existing plans, utility and topographic information. These will be developed in compliance with City of Lansing Standards.

Topographic Survey
Gilbert M. Barish, P.S., CFedS of Geodetic Designs Inc. will assume the responsible charge for the surveying task for this project. The surveying procedures and methodology will comply with Michigan laws relative to land surveying. The most current Standards of Practice for MDOT Design Surveys, the published City of Lansing survey standards, and the project parameters identified in the provided request for proposal shall serve as the guidelines for the procedures used to conduct all work on this project.

Survey and control exists for this project that was used by the City. We anticipate additional pickup survey for this project to locate headwalls and retaining walls.

Geotechnical Engineering
SME will perform two soil borings for this project. We plan for two deep borings for the bridge option as the worst case, but will drill only for the culvert if that becomes the recommended option.

We have included as an add on the cost for a non-destructive probe at two locations from Miller Road to the top of the existing culvert to assess the actual depth of fill that exists beneath the roadway.

SME will obtain two grain size samples to determine D50 of the soils in the stream.

Concept design and layout of the culvert and wingwalls/headwalls and riprap is included.

Task III – Hydraulic Modeling and EGLE Coordination

Current flows from EGLE will be obtained for Boulter Drain and Pawlowski Creek. We have obtained the FIRM map for Pawlowski Creek.

Existing and proposed conditions for the crossing will be modeled utilizing HEC RAS or other suitable software.

The proposed condition will be for the recommended alternate after cleared with the City.

We plan to do preliminary scour countermeasure design for the purpose of obtaining suitable project costs.

Results will be compiled into a simplified Hydraulic Report for the project.

We will coordinate with EGLE for obtaining the permit for both the hydraulics of the new structure. We have assumed two meetings with EGLE for this task.

Task IV - Existing Structure Monitoring

C2AE has been out to the project site to measure the sag in the culvert.

For future weekly readings (assume 10 readings), we will measure the height and width at both ends of the culvert and at the sagged area. These measurements will be recorded in a spreadsheet and can be provided to the City on a weekly basis if desired.

If there is noticeable change in the measurements in any of these locations, the City will be notified immediately.

As discussed on multiple occasions, the existing traffic control to keep traffic off of the area where the culvert has heaved/caved is very important to protect the culvert from future deformation.

Assumptions

Costs and approach are based on the RFP received 5/28/19 and meeting with the City on 6/19/19.

The City will provide CAD files for their Miller Road resurfacing project.

The City will provide proposed sidewalk width and setback for future sidewalk on the north side of Miller Road.

Budget is based on Field review meeting with EGLE and two follow up meetings with EGLE.

Existing water mains will be removed and replaced beneath future structure.

If non-destructive probes are desired to the top of the existing culvert to determine depth of fill, they will be an additional $250 each.
TEAM ORGANIZATION CHART

Andy Schor, Mayor

Project Manager/Lead
Structural Engineer
Al Kaltenthaler, PE, SE

Structural Engineer
Mandy Marsh, PE, LEED AP

Lead Hydraulics Engineer
Mark Adams, PE

Municipal Utilities Engineer
Adam Falkowski, PE

Utilities Engineer
Mike Seling, PE

Road Engineer
Tyler Ruel, PE

CAD Technician
David McPherrren, EIT

QA Engineer
Scott Cook

CAD Tech./Const. Admin./Office Technician
David Kalmbach, PE

Field Engineer
Caroline Schuetz

Senior Hydraulics Engineer
Tom Bourdon, PE

Administrative Assistant
Julie Boerema

Administrative Assistant
Beth Dillsworth

Surveying
Geodetic Designs

Geotechnical Engineering
SME
The City of Holland Transportation Services Department in cooperation with the Holland Board of Public Works required assistance for design, construction engineering and contract administration services for the reconstruction of Lincoln Avenue, from 24th Street to 16th Street.

The project included funding from several different State funding and City departments totaling $2.5 million. The project was completed in accordance with the Local Agency Programs (LAP) and AASHTO guidelines.

C2AE was able to provide the plans, specifications, and estimate, including environmental permits from the Environmental Protection Agency through the state's Department of Environmental Quality, and secure acquisition of additional right-of-way from multiple private and commercial property owners with a similar time frame requested by Elkhart County Highway Department, and with no design related change orders during construction.
The City of Eaton Rapids selected C2AE for the design, bidding, and construction of improvements on the Hall Street bridge over Mill Run.

The existing structure is a 17” x 36” prestressed box beam bridge with a single span of 47 feet. Among the planned improvements are the replacement of aged railing and the removal and replacement of pavement, waterproofing membrane, and guardrail. Approach roadway will be improved and the addition of sidewalk along the east side of the bridge will connect a nearby park to a parking lot.

C2AE has submitted an MDOT Local Bridge Funding application to finance 95% of the construction costs, leaving the remaining 5% to the City of Eaton Rapids. The firm also submitted for funds to add the sidewalk and replace the out-of-date guardrail.

This project is the last of a series of four bridge preventative maintenance projects in Eaton Rapids completed by C2AE. Construction is set for spring of 2019.
C2AE worked with the city of Lansing on the rehabilitation of several major streets; updates included cold milling and resurfacing, ADA-compliant upgrades to the sidewalk ramps, review of sewer videotaping for repairs, and coordination with the Lansing Board of Water and Light for the replacement of water services.

Rehabilitated streets for this project were:
- Martin Luther King Jr. Blvd., Ottawa Street to Saginaw Street
- Martin Luther King Jr. Blvd., Oakland Avenue to the Grand River, pictured above (6,855 feet)
- Mt. Hope Avenue, MLK to Pattengill Avenue (1,224 feet)
- Cedar Street, i-96 BL to Edgewood Blvd. (713 feet)
- Willow Street, West City Limit to Linwood Street, pictured left (3,759 feet)

"C2AE performed particularly well on our FY 15 Major Street Rehabilitation project. MDOT asked for a final submittal early in order to obligate funding and C2AE was able to submit the final package 17 days before the "normal" MDOT deadline for the July bid opening. Construction administration and inspection for this project has been handled very well by C2AE, keeping the construction of the project running smoothly."

- Ann M. Parry, PE, Project Engineer for the City of Lansing
The City of Williamston hired C2AE to design and oversee construction the replacement of this two-span bridge with a single-span box beam structure.

On the edge of McCormick Park, the Putnam Street Bridge serves as the Williamston's sole river crossing between the downtown business district and the residences and schools to the north. As a major link for the city, traffic maintenance on a minimum of one lane was required throughout construction. The team drafted a temporary traffic signal control design as part of the MDOT permitting process. Accommodating traffic access on West Riverside Street was critical, as the intersection with Putnam Street lies within the controlled zone typically restricted by MDOT during construction.

The design incorporated provisions for a bicycle/pedestrian pathway beneath the bridge as well as water main upgrades. Decorative railing complement the light poles along the road and into the park. The red brick appears as a continuation of the Wall of Honor, a nearby memorial to fallen veterans.
# SUMMARY OF STAFF-HOUR DISTRIBUTION

**FIGURE 1**

Engineering Services for Miller Road Culvert Replacement Project

FIRM: CZAE

[Signature]

Date: June 26, 2019

Authorized Signature

<table>
<thead>
<tr>
<th>Name of Principal Staff Members</th>
<th>Role in Project</th>
<th>Task I</th>
<th>Task II</th>
<th>Task III</th>
<th>Task IV</th>
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### SUMMARY OF COSTS - COST BREAKDOWN

**FIGURE 2**

Engineering Services for Miller Road Culvert Replacement Project

**FIRM:** CZAE  
**Date:** June 26, 2019

**Task I: Scoping**

<table>
<thead>
<tr>
<th>NAME OF PRINCIPAL STAFF MEMBERS</th>
<th>ROLE IN PROJECT</th>
<th>TOTAL HOURS</th>
<th>RATE</th>
<th>DIRECT LABOR</th>
<th>OVERHEAD</th>
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**SUB-TOTAL**  
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**SUPPLIES & MATERIALS**

- Reproduction -$0 @ $0.50/each  
  0.5  
  $25.00

**TRANSPORTATION**

- Mileage -$25 @ $0.58/mile  
  0.58  
  $14.50

**OTHER DIRECT COSTS:**

- Subconsultant - SME  
  $13,800.00

**PROFIT**  
$1,470.74

**TOTAL**  
$28,680.63
### SUMMARY OF COSTS - COST BREAKDOWN
#### FIGURE 3

**Engineering Services for Miller Road Culvert Replacement Project**

**FIRM: C2AE**

**Date: June 26, 2019**

**Task II: Topographic Surveys and Base Map**

<table>
<thead>
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<th>NAME OF PRINCIPAL STAFF MEMBERS</th>
<th>ROLE IN PROJECT</th>
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<th>RATE</th>
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**SUB-TOTAL**

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**SUPPLIES & MATERIALS**

- Reproduction -50 @ $0.50/each

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$25.00

**TRANSPORTATION**

- Mileage-25 @ $0.58/mile

0.58

$14.50

**OTHER DIRECT COSTS:**

- Subconsultant - Geodetic

$6,000.00

**PROFIT**

$764.94

**TOTAL**

$13,758.42
### SUMMARY OF COSTS - COST BREAKDOWN

**FIGURE 4**

Engineering Services for Miller Road Culvert Replacement Project

FIRM: C2AE  
Date: June 26, 2019

**Task III: Hydraulic Modeling/EGLE Coordination**

<table>
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<tr>
<th>NAME OF PRINCIPAL STAFF MEMBERS</th>
<th>ROLE IN PROJECT</th>
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**TRANSPORTATION**

- Mileage - 295 @ $0.58/mile  
  0.58  
  $252.30

**OTHER DIRECT COSTS:**

**PROFIT**

$2,236.46

**TOTAL**

$22,845.21
### SUMMARY OF COSTS - COST BREAKDOWN

#### FIGURE 5

Engineering Services for Miller Road Culvert Replacement Project

FIRM: C2AE

Date: June 26, 2019

#### Task IV: Existing Structure Monitoring

<table>
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<tr>
<th>NAME OF PRINCIPAL STAFF MEMBERS</th>
<th>ROLE IN PROJECT</th>
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<th>RATE</th>
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<td>Mike Seling, PE</td>
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<td>Tyler Ruel, PE</td>
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<td>David McPherson, EIT</td>
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<td>$26.06</td>
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<td>CAD Tech/Const Admin/Office Tech</td>
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<td>Caroline Schutz</td>
<td>Field Engineer</td>
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<td>$204.00</td>
<td>$395.76</td>
<td>$599.76</td>
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<td>Tom Bourdon, PE</td>
<td>Senior Hydraulics Engineer</td>
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<td>Julie Boerma</td>
<td>Administrative Assistant</td>
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<td>Beth Dillsworth</td>
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</table>

**SUB-TOTAL** 43 $4,038.18

#### SUPPLIES & MATERIALS
- Reproduction - 50 @ $0.50/each: 0.5 $25.00

#### TRANSPORTATION
- Mileage - 150 @ $0.58/mile: 0.58 $87.00

#### OTHER DIRECT COSTS:

**PROFIT**

$444.20

**TOTAL**

$4,594.38
# SUMMARY OF COSTS

**Engineering Services for Miller Road Culvert Replacement Project**

FIRM: C2AE  
Authorized Signature  
Date: June 26, 2019

<table>
<thead>
<tr>
<th>Task No.</th>
<th>Task Description</th>
<th>Labor &amp; Overhead</th>
<th>Supplies &amp; Materials</th>
<th>Transportation</th>
<th>Other Direct Costs</th>
<th>Profit</th>
<th>Total</th>
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<tr>
<td>I</td>
<td>Scoping</td>
<td>$13,370.39</td>
<td>$25.00</td>
<td>$14.50</td>
<td>$13,800.00</td>
<td>$1,470.74</td>
<td>$28,680.63</td>
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<tr>
<td>II</td>
<td>Topographic Surveys &amp; Base Maps</td>
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<td>$25.00</td>
<td>$14.50</td>
<td>$6,000.00</td>
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<td>$13,758.42</td>
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<tr>
<td>III</td>
<td>Hydraulic Modeling / EGLE Coordination</td>
<td>$20,331.45</td>
<td>$25.00</td>
<td>$252.30</td>
<td>$0.00</td>
<td>$2,236.46</td>
<td>$22,845.21</td>
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<td>IV</td>
<td>Existing Structure Monitoring</td>
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<td>$25.00</td>
<td>$87.00</td>
<td>$0.00</td>
<td>$444.20</td>
<td>$4,594.38</td>
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</table>

**TOTAL NOT-TO-EXCEED COST**  
$44,694.00  
$100.00  
$368.30  
$19,800.00  
$4,916.34  
$69,878.64
TO: Andy Schor, Mayor
FROM: Stephanie Robinson CPPB, Senior Buyer
DATE: July 18, 2019
SUBJECT: Sole Source Purchase – TIBA, Traffic and Safety

Please include this Sole Source packet of information in your transmittal to Council as required by the Purchasing Ordinance Section 206.05.

In summary, the Purchasing Office processed the following Sole Source transaction:

Department: Economic, Development and Planning - Parking Services Office
Vendor: Traffic and Safety Control Systems Inc.
Item Purchased: TIBA Parking Entry and Exit Management Solutions
Dollar Amount: $1,282,923.00

Additional information pertaining to this purchase is attached for your information.

This letter is filed in accordance with the Purchasing Ordinance Section 206.05 (a) and (b).

slr
TO: Andy Schor, Mayor  
Samantha Harkins, Chief of Staff

FROM: Stephanie Robinson, CPPB, Senior Buyer

DATE: July 9, 2019

SUBJECT: Sole Source – TiBA, Traffic and Safety

The Parking Services Office requests that Traffic and Safety be designated as a Sole Source vendor for TiBA Parking Entry and Exit Management Solution.

Please see the attached letter from Chad Gamble and Brian McGrain, Department of Economic Development and Planning Director regarding the request from last September. This purchase order will be the balance of the work to be done in FY20 noted in the memo.

Based on the attached letter we recommend issuing a sole source purchase orders to Traffic and Safety Control Systems, Inc. in the amount of $1,052,618 and $230,305 from account numbers 585.453641.977000, 585.453645.977000, 585.453646.977000, 585.453648.977000 and 585.453647.977000 per the request of the Department of Economic Development and Planning Department.

Attachment

Date: 7-9-19

Approved

Andy Schor, Mayor
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>UNIT PRICE</th>
<th>EXTENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>NORTH GRAND RAMP TIBA PARCS EQUIPMENT AS PER 7/2/19 PROPOSAL</td>
<td>460,212</td>
<td>LS</td>
<td>1.00</td>
<td>460,212.00</td>
</tr>
<tr>
<td>002</td>
<td>NORTH CAPITOL RAMP TIBA PARCS EQUIPMENT AS PER 7/2/19 PROPOSAL</td>
<td>252,141</td>
<td>LS</td>
<td>1.00</td>
<td>252,141.00</td>
</tr>
<tr>
<td>003</td>
<td>SOUTH CAPITOL RAMP TIBA PARCS EQUIPMENT AS PER 7/2/19 PROPOSAL</td>
<td>340,265</td>
<td>LS</td>
<td>1.00</td>
<td>340,265.00</td>
</tr>
</tbody>
</table>

THE ARTICLES SPECIFIED ARE SUBJECT TO THE FOLLOWING CONDITIONS:

1. Goods other than those specified on this order must not be substituted or prices changed without authorization.
2. If the quantity shipped is short of the purchase order quantity, specify on the packing slip if that quantity is on back order or cancelled.

Federal Tax ID: 38-6004628

AUTHORIZED SIGNATURE

[Signature]
**City of Lansing**  
**PURCHASE ORDER STATUS INQUIRY**  
**PURCHASE ORDER INFORMATION**

**PO Number:** P086073  
**Vendor:** V051120  
**PR Number:** PR014521  
**Address:** PR 48584 DOWNING  
**WIXOM, MI 48393-3501**

**Confirm:**  
**Requested by:** 11107  
**Req. Dt:** 07/03/2019  
**Blanket Number:**

**Account:**
**Approved Status:** APRV  
**Apr. Dt:** 07/08/2019  
**Blanket Amount:**

**Bid:**
**Printed by:** SROBINSO  
**Print Dt:** 07/08/2019  
**Blanket Remaining:**

**Contract:**
**Buyer:**
**Ship To:** S10600  
**End Use:** CHAD GAMBLE

**Bill To:** S10600  
**Terms:** NET 30

---

### ITEMS

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<tr>
<th>Item</th>
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<th>Qty Received</th>
<th>UN</th>
<th>Unit Price</th>
<th>Key</th>
<th>Object</th>
<th>Tax1</th>
<th>Tax2</th>
<th>Discount Charges</th>
<th>Extended</th>
<th>F/A Print</th>
<th>Ship To</th>
<th>Wsce</th>
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<tbody>
<tr>
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<td>LS</td>
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<td></td>
<td>460,212.00</td>
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**NORTH GRAND RAMP TIBA PARCS**  
EQUIPMENT AS PER 7/2/19  
PROPOSAL

<table>
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<tr>
<th>Item</th>
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<th>Qty Received</th>
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<th>Unit Price</th>
<th>Key</th>
<th>Object</th>
<th>Tax1</th>
<th>Tax2</th>
<th>Discount Charges</th>
<th>Extended</th>
<th>F/A Print</th>
<th>Ship To</th>
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<th>Chg</th>
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</thead>
<tbody>
<tr>
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<td>252,141.00</td>
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**SPLIT 5853647**
**977000**

**SPLIT 5853641**
**977000**

**NORTH CAPITOL RAMP TIBA PARCS**  
EQUIPMENT AS PER 7/2/19  
PROPOSAL

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<th>Item</th>
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<th>Unit Price</th>
<th>Key</th>
<th>Object</th>
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<th>Discount Charges</th>
<th>Extended</th>
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<th>Ship To</th>
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<td>340,265.00</td>
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**SOUTH CAPITOL RAMP TIBA PARCS**  
EQUIPMENT AS PER 7/2/19  
PROPOSAL

---

### APPROVAL STATUS

This Requisition has been approved

**Status**  
**Approver**
**Received In**
**Processed Out**

- Accepted
  - Wyatt, Susan
  - Received In: 2019/07/03 15:17:06
  - Processed Out: 2019/07/03 15:12:09
- Accepted
  - Chad Gamble
  - Received In: 2019/07/03 15:19:38
  - Processed Out: 2019/07/03 15:17:08
- Accepted
  - Stephanie Robinson
  - Received In: 2019/07/03 7:44:48
  - Processed Out: 2019/07/03 7:40:10
- Accepted
  - Shell, Traci L
  - Received In: 2019/07/03 7:45:21
  - Processed Out: 2019/07/03 7:44:52
- Accepted
  - Received In: 2019/07/03 7:45:23
  - Processed Out: 2019/07/03 7:45:23

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### ENCUMBRANCES

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<td>977000</td>
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<td>977000</td>
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**Balance:** 1,052,618.00

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User: Stephanie Robinson  
Report: RME_POST_CC_70  
Page: 65  
Current Date: 07/09/2019  
Current Time: 12:54:15
**PURCHASE ORDER**

- **P.O. NUMBER:** P085993
- **DATE:** 07/05/19
- **VENDOR I.D.:** V051120
- **DELMIVERY DATE:**
- **FOB:**
- **REQUISITION NO:** PRO14415

---

**TO:** TRAFFIC & SAFETY CONTROL SYSTEMS INC
48584 DOWNING
WIXOM, MI 48393-3501

**PHONE#** (248) 348-6505  **FAX#** (248) 348-6505

---

**SEND INVOICE TO:**
PLANNING NEIGHBORHOOD DEV PARKING OFFICE
219 N GRAND AVE
LANSONG, MI 48933

---

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>UNIT PRICE</th>
<th>EXTENSION</th>
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</thead>
<tbody>
<tr>
<td>001</td>
<td>PRO M T BARRIER GATES</td>
<td>7</td>
<td>EA</td>
<td>3,553.00</td>
<td>24,871.00</td>
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<tr>
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<td>MP 30 TICKET DISPENSER W/PAY ON ENTRY OPTION</td>
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<td>EA</td>
<td>9,855.00</td>
<td>39,420.00</td>
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<tr>
<td>003</td>
<td>PROX READERS</td>
<td>2</td>
<td>EA</td>
<td>389.00</td>
<td>778.00</td>
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<td>004</td>
<td>PROX CARDS</td>
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<td>500.00</td>
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<td>005</td>
<td>SW 30 EXIT VERIFIER W/P2PE CC</td>
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<td>EA</td>
<td>11,678.00</td>
<td>35,034.00</td>
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<tr>
<td>006</td>
<td>APS 30 PAY ON FOOT, CASH, COIN AND P2PE CC</td>
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<td>EA</td>
<td>36,712.00</td>
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<td>007</td>
<td>CT20 CONTROLLER</td>
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<td>EA</td>
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<td>6,216.00</td>
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<tr>
<td>008</td>
<td>TMS SMART PARK SOFTWARE FACILITY PARKING MANAGEMENT: COUNT, ACCESS, REVENUE, CREDIT CARD 5 WEB CLIENT SEATS VALIDATION STICKER SYSTEM</td>
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<td>11,207.00</td>
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<td>009</td>
<td>VPN LICENSING 3 YEAR SERVICE</td>
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<td>BOOTH REMOVAL</td>
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<td>41,200.00</td>
</tr>
</tbody>
</table>

***CONTINUED ON NEXT PAGE***

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**THE ARTICLES SPECIFIED ARE SUBJECT TO THE FOLLOWING CONDITIONS:**

1. Goods other than those specified on this order must not be substituted or prices changed without written authorization.
2. If the quantity shipped is short of the purchase order quantity, specify on the packing slip if that quantity is a back order or cancelled.

Federal Tax ID: 38-6004628

**AUTHORIZED SIGNATURE**
PRIORITY ORDER
P.O. NUMBER  PR014438
DATE       07/05/19
VENDOR I.D. V051120
DELIVERY DATE
FOB
REQUISITION NO.

OUR PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES, PACKING LIST AND CORRESPONDENCE.

TO: TRAFFIC & SAFETY CONTROL SYSTEMS INC
48584 DOWING
WIXOM, MI 48393-3501

PHONE# (248) 348-6505 FAX# (248) 348-6505

DELIVER ITEMS TO:
PLANNING NEIGHBORHOOD DEV PARKING OFFICE
219 N GRAND AVE
LANSONG, MI 48933

SEND INVOICE TO:
PLANNING NEIGHBORHOOD DEV PARKING OFFICE
219 N GRAND AVE
LANSONG, MI 48933

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>UNIT PRICE</th>
<th>EXTENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>012</td>
<td>AMEND 1: 8 QR BAR CODE SCANNERS.</td>
<td>10,640</td>
<td>LS</td>
<td>1.00</td>
<td>10,640.00</td>
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<tr>
<td>013</td>
<td>AMEND 1: 1 COUPON VALIDATION SYSTEM.</td>
<td>1,500</td>
<td>LS</td>
<td>1.00</td>
<td>1,500.00</td>
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<tr>
<td>014</td>
<td>AMEND 1: 4 PARKER VIDEO INTERCOMS.</td>
<td>10,988</td>
<td>LS</td>
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<td>10,988.00</td>
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<tr>
<td>015</td>
<td>AMEND 1: 4 PARKER AUDIO INTERCOMS.</td>
<td>3,939</td>
<td>LS</td>
<td>1.00</td>
<td>3,939.00</td>
</tr>
<tr>
<td>016</td>
<td>AMEND 2: (3) LED &quot;FULL&quot; SIGNS WITH STANDS.</td>
<td>2,550</td>
<td>LS</td>
<td>1.00</td>
<td>2,550.00</td>
</tr>
</tbody>
</table>

TAX  0.00

TOTAL  230,305.00

THE ARTICLES SPECIFIED ARE SUBJECT TO THE FOLLOWING CONDITIONS:
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Federal Tax ID: 18-6004628

AUTHORIZED SIGNATURE
Traffic & Safety Control Systems, Inc.

July 2, 2019

City of Lansing Parking Services
219 N. Grand Avenue
Lansing, MI 48933
Mr. Chad Gamble, Parking Manager

Subject: PARCS EQUIPMENT PROPOSAL - TIBA BAR CODE SYSTEM WITH LOCAL IT SERVERS

<table>
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<tr>
<th>CONVENTION CENTER</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
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<tbody>
<tr>
<td>(7) PRO M T Barrier gates</td>
<td>$3,553.00</td>
<td>$24,871.00</td>
</tr>
<tr>
<td>(4) MP 30 Ticket Dispenser w/Pay on Entry Option</td>
<td>9,855.00</td>
<td>39,420.00</td>
</tr>
<tr>
<td>(2) Prox readers</td>
<td>389.00</td>
<td>778.00</td>
</tr>
<tr>
<td>(100) Prox cards</td>
<td>5.00</td>
<td>500.00</td>
</tr>
<tr>
<td>(3) SW 30 Exit Verifier w/ P2PE CC</td>
<td>11,678.00</td>
<td>35,034.00</td>
</tr>
<tr>
<td>(1) APS 30 Pay on Foot, Cash, Coin and P2PE CC</td>
<td>36,712.00</td>
<td>36,712.00</td>
</tr>
<tr>
<td>(2) CT20 Controller</td>
<td>3,108.00</td>
<td>6,216.00</td>
</tr>
<tr>
<td>(1) TMS Smart Park Software Facility Parking Management</td>
<td>11,207.00</td>
<td>11,207.00</td>
</tr>
<tr>
<td>- Count, Access, Revenue, Credit Card</td>
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<td></td>
</tr>
<tr>
<td>- 5 Web Client seats</td>
<td></td>
<td></td>
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<tr>
<td>- Validation Sticker system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) VPN Licensing 3 Year Service</td>
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<td>3,000.00</td>
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<tr>
<td>(8) QR Bar code scanners</td>
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<tr>
<td>(1) Coupon Validation System</td>
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<td>1,500.00</td>
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<td>(4) Parker Video Intercom</td>
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<td>(1) Installation</td>
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Added: (3) LED "FULL" signs with stands                                           |           | 2,550.00      |

Sub Total                                                                         | $228,552.00

NORTH GRAND RAMP

<table>
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<tr>
<th>CONVENTION CENTER</th>
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<td>25,488.00</td>
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<tr>
<td>(6) SW 30 Exit Verifier w/ P2PE CC/QR scanner</td>
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<td>78,048.00</td>
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<tr>
<td>(4) APS 30 Pay on Foot, Cash, Coin and P2PE CC</td>
<td>36,712.00</td>
<td>146,848.00</td>
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<tr>
<td>(1) TMS Smart Park Software Facility Parking Management</td>
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<tr>
<td>- Count, Access, Revenue, Credit Card</td>
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<td>- 5 Web Client seats</td>
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<tr>
<td>- Validation Sticker system</td>
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<tr>
<td>(1) VPN Licensing 3 Year Service</td>
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<tr>
<td>(10) Parker Video Intercom</td>
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<td>(3) Parker audio Intercom</td>
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Sub Total                                                                         | $460,212.00

48584 Downing · Wixom, MI 48393-3501 · (248) 348-0570 · FAX (248) 348-6505
www.trafficandsafety.com
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<tr>
<td>(2500) Hang Tags</td>
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<tr>
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<td>$73,424.00</td>
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<tr>
<td>(1) CT20 Controller</td>
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Sub Total                                               | $252,141.00|

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<td>$36,712.00</td>
<td>$73,424.00</td>
</tr>
<tr>
<td>(1) POF Shelter</td>
<td>$7,812.00</td>
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<tr>
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<td>$11,207.00</td>
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Sub Total                                               | $340,265.00|

Total Project Cost                                       | $1,281,170.00|

Options to be reviewed:
- QR Bar code scanners                                   | $1,330.00 each lane
- Event prepay CC w/free out                             | $1,300.00 each lane
- Chaser coupon Validation System                       | $1,500.00

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- Online Validation System (5 user) $ 3,150.00
- TMS- CVPS Valet interface $ 10,750.00
- Third Party Reservation Systems TBD
- Red X Green Arrow Signs $ 800.00

Installation to include the following:

- Remove existing equipment.
- Saw cut and install vehicle detection loops, if necessary.
- Mount all control equipment.
- Pull necessary control wires and terminate all wires.
- Final tune-in and checkout of control system.
- Two-year warranty covering all parts and labor warranty to repair or replace defective parts due to normal wear and tear. Acts of God, vandalism, or misuse is not covered.
- Unlimited training on site

Notes:

- All power shall be brought to the gate location by others. It shall be a system that meets NEC standards.
- All signing for traffic control shall be provided and installed by others.
- All conduits for power and control wiring shall be provided and installed by others.
- All concrete islands and/or mounting pads shall be provided and installed by others. This includes concrete filled protective barrier posts.
- Site preparation shall be done by others according to layout drawings supplied by Traffic & Safety if applicable.
- This quote is valid for 90 days.
- Terms are 50% deposit with order; second payment 25% upon delivery of equipment, Balance is net 30 days after installation. A 1-1/2% per month finance charge will be added to all invoices older than 30 days.
- CAUTION: This equipment is for automobiles only. Clearly marked alternate paths must be provided for motorcycles, bicycles, and pedestrians.

Thank you for the opportunity to quote.

Jeffrey E. Timar
Traffic and Safety
May 21, 2019

City of Lansing Parking Services  
219 N. Grand Avenue  
Lansing, MI 48933  
Mr. Chad Gamble, Parking Manager

Subject: PARCS EQUIPMENT PROPOSAL - TIBA BAR CODE SYSTEM WITH LOCAL IT SERVERS

<table>
<thead>
<tr>
<th>CONVENTION CENTER</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
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<tbody>
<tr>
<td>(7) PRO M T Barrier gates</td>
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<td>• Count, Access, Revenue, Credit Card</td>
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<tr>
<td>• 5 Web Client seats</td>
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<td>• Validation Sticker system</td>
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<tr>
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Total | $227,752.00 |

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Traffic & Safety Control Systems, Inc.

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<td>• Web Client seats</td>
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Total Project Cost: $1,267,275.00

Options to be reviewed:
- 3rd party API's: TBD
- QR Bar code scanners: $1,330.00 each lane
- Event prepay CC w/free out: $1,300.00 each lane

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www.trafficandsafety.com
Traffic & Safety Control Systems, Inc.

- Chaser coupon Validation System $ 1,500.00
- Online Validation System (5 user) $ 3,150.00
- Command Intercom System $37,043.00 (Based on 22 terminals)
- PARKER Video Intercom System $68,934.00 (Based on 22 terminals)
- Recycling cash in Pay-on-Foot $ 7,860.00 each unit
- TMS- CVPS Valet interface $ 10,750.00
- Third Party Reservation Systems TBD
- Level Count and Signs TBD

Installation to include the following:

- Remove existing equipment.
- Saw cut and install vehicle detection loops, if necessary.
- Mount all control equipment.
- Pull necessary control wires and terminate all wires.
- Final tune-in and checkout of control system.
- Two-year warranty covering all parts and labor warranty to repair or replace defective parts due to normal wear and tear. Acts of God, vandalism, or misuse is not covered.
- Unlimited training on site

Notes:

- All power shall be brought to the gate location by others. It shall be a system that meets NEC standards.
- All signing for traffic control shall be provided and installed by others.
- All conduits for power and control wiring shall be provided and installed by others.
- All concrete islands and/or mounting pads shall be provided and installed by others. This includes concrete filled protective barrier posts.
- Site preparation shall be done by others according to layout drawings supplied by Traffic & Safety if applicable.
- This quote is valid for 90 days.
- Terms are 50% deposit with order; second payment 25% upon delivery of equipment, Balance is net 30 days after installation. A 1-½% per month finance charge will be added to all invoices older than 30 days.
- CAUTION: This equipment is for automobiles only. Clearly marked alternate paths must be provided for motorcycles, bicycles, and pedestrians.

Thank you for the opportunity to quote.

Jeffrey E. Timar
Traffic and Safety
MEMORANDUM

To: Stephanie Robinson, Senior Buyer

From: Chad A. Gamble, P.E., Parking Manager

Subject: Request for Sole source Procurement for Parking Entry and Exit Management Solution

Date: September 17, 2018

Please let this memo serve as a request for the issuance of a sole source purchase order for procurement for the Parking Services Office (PSO) for all parking and revenue control systems and related appurtenances (collectively referred to as PARCS equipment) for all of the PSO PARCS related assets.

As has been previously presented, our current PARCS equipment is an average of 9 years old. The average life expectancy of this equipment is 7 years. This equipment is the source for many delays and backups and customer frustrations in our facilities due to its age and hardware/software failures. In addition, huge advancements have been made in the capability to increase the customer service experience of the PARCS equipment by remote controlling the machines, troubleshooting from a web application via a smart phone, and overall systemic improvements via software design and utilization comporting with operational demands and preferences.

It is for this reason that an investigation and purchase of PARCS equipment was necessary, anticipated and budgeted for FY 18, FY 19 and FY 20. This equipment is one of the major improvements that will be made as part of our 5 year extreme makeover of our facilities.

Over the past seven months the PSO has completed an exhaustive investigation and analysis of the varying types of solutions that are on the market that would supply PARCS equipment. We assembled a team of City Employees that represent all users and stakeholders of what will be the new PARCS hardware and software. The individuals that were involved in the analysis were:

Chad Gamble, Parking Manager
Traci Shell, Interim Assistant Parking Coordinator
Susan Wyatt, Interim Parking Operations Supervisor
Ann Garza, Interim Permit Coordinator
San Quon, GIS Administrator
Alan McCarrick, IT Help Desk Manager
Jamie Trieweiler, IT Project Manager
Anthony Smith, Parking Technician
Ted Minix, Parking Technician
The following activities, site visits and reviews were performed as part of our investigation and review efforts. The last names of City team members who were part of the activity are indicated at the beginning of each line.

1. Gamble, Shell and Minix attended Parking Infrastructure Expo in Chicago to perform hands on test on multiple PARCS vendor equipment lines. This included discussions with company programmers and operational experts.
2. McCarrick, Gamble, Shell, Smith and Quon visit with Ann Arbor DDA staff. This visit included interviews with their IT team members, operational and management staff on their use of TIBA and Amano McGann equipment.
3. Garza, Smith and Wyatt tour of Wixom TIBA testing lab with hands on opportunities with all types of PARCS equipment and opportunities to ask and receive answers to financial and operational questions.
4. Gamble, Wyatt, Shell, Garza and Minix were attendees of presentation of DeSigna in office detailing functionality and programming of their back end software management systems.
5. Gamble tour of Sparrow Hospital and interview with their Parking Manager and on site Management Company on their investigation, purchase and experience of PARCS equipment highlighting the functionality of Amano McGann and TIBA equipment. They indicated difficulties with the deployment of their Amano McGann - Opus equipment.
6. Interviews of Gerald R. Ford International Airport staff after recent purchase of new DeSigna equipment.
7. Interviews of City of Grand Rapids parking management staff regarding their recent pilot PARCS equipment installation project.
8. Interview of City Kalamazoo on their recent purchase of equipment.

The purchase of PARCS equipment is a very complex and multi-faceted process. One must ensure variables like software integrations, user friendliness, ease of operations, break/fix simplicity, flexibility with other users (i.e. hotels, conference centers and other 3rd party vendors), expandability and upgradability into new systems (i.e. license place recognition capabilities), aesthetics, general support, and service response service level indicators all fit into the goals and objectives of all users and operators of the system.

The selection process, understanding all of the above categories and more, was broken down into three general categories. They are listed below with a general write-up of findings and their recommendation on the selection of PARCS equipment.

**Operations/Technicians (By: Ted Minix & Anthony Smith)**
The maintenance staff of the PSO supports TIBA as the choice for Lansing’s parking PARCS contract. After comparing TIBA with other companies we believe TIBA offers the best combination of customer convenience with simplicity of maintenance and repair by the PSO Maintenance Technicians. Having a bar code based functionality allows an almost fail proof ability to read customers time tickets and less chance of an error due to mag strip malfunction. In addition, TIBA offers climate and temperature controlled machine enclosures and pay on foot options.

TIBA’s maintenance staff are based locally in Michigan whereas the other companies are out of state and or have few technicians that could respond. Therefore, it is our opinion that the TIBA system is the best choice to accommodate both the customer and tech support for the PSO office.

**Parking Administration**
The PARCS product lines that impressed us the most during our study were DeSigna and TIBA. The overall machine designs are very similar and internal equipment layout and functionality is comparable. Both machine lines are much simpler builds that our current Amano McGann (AM) equipment, and even the modernized AM equipment. Both DeSigna and TIBA can use bar code technology. DeSigna prefers the multi-side mag stripe technology.
The software that is used by both companies has the capability of remote controlling all machines and issuing corrective charges in real time from any smart phone, tablet or laptop. However, the software and IT side of TIBA is more open and user friendly. This open architecture makes it more apt to modify and integrate with other 3rd party vendors. After interviewing several different users of DeSigna equipment, all expressed challenges with software integration and interfacing issues.

DeSigna has an overall, more pleasing aesthetic design of their cabinets than TIBA. However, both machines had very good reviews on its reliability and ability to withstand northern climates. DeSigna has had very few machines deployed in Michigan and does not have any deployed for more than 2 years. Both machines have internal climate control systems that work to keep the climate in the machine within a narrow operating parameter and thus preserve and protect the equipment. However, the TIBA climate controls were automatic and the DeSigna controls had to be manually changed each day.

DeSigna machines are serviced by Light and Bruening (LB). DeSigna via LB is just getting a foothold in the State of Michigan and are just beginning to deploy machines in the State. However, Light and Bruening has been servicing and repairing parking equipment for decades. During our investigation and interviews related to the servicing of this equipment, we understand that this company has had several challenges with their overall service to other municipalities.

In addition to the technical and operational investigation we also requested quotes for the projected new equipment we will install in the North Grand Ramp from both vendors. The request for quotes is attached along with the responses from each company. In the analysis of the submissions, the overall costs yielded TIBA less expensive than DeSigna.

Therefore, based on the comprehensive and exhaustive research, the results of the quotes, and the fact that Traffic and Safety is the sole source vendor responsible for all sales of TIBA equipment in the state of Michigan, on behalf of the Review Team’s unanimous assessment, I recommend that a sole source contract be issued to Traffic and Safety for the purposes of purchasing necessary PARCS equipment and software to support the TIBA platform.

The respective multi-year costs will be paid from multiple fiscal years out of the following accounts:

| Maintenance - Equipment:             | 585.453643.977000.0 |
| South Capitol Parking Ramp – Equipment | 585.453645.977000.0 |
| North Grand Parking Ramp – Equipment  | 585.453646.977000.0 |
| North Capitol Capitol Parking Ramp – Equipment | 585.453647.977000.0 |
| Townsend Ramp – Equipment            | 585.453648.977000.0 |

Approved: ___________________________  Date: 9/18/18

Brian McGrain, Director
Department of Economic Development and Planning
MEMORANDUM

To: Jeff Timer, Traffic & Safety
From: Chad Gamble, Parking Manager
Subject: Request for Quotes for PARCS equipment
Date: August 27, 2018

The City of Lansing Parking Services Office will be purchasing new PARCS equipment in the next few months. We are requesting a quote for the following equipment listed below. The system that will be purchased will be hosted by the vendor. Please include installation costs, set-up and anything that necessary to include to make PARCS equipment functional. Please send the quote back via e-mail Chad.Gamble@lansingmi.gov and Traci.Shell@lansingmi.gov

North Grand Parking Ramp PARCS Equipment

- Spitter ticket machines with bar coding: 2
- RFID Readers: 11
- Pay-on-Foot machines: 5
- Credit Card & Bar Code exit machines: 5
- Count System: 1

Thank you.

Chad Gamble, Parking Manager
September 6, 2018

City of Lansing
Transportation Office
219 North Grand Avenue
Lansing, MI 48933
Mr. Chad Gamble
Ms. Traci Shell

Subject: TIBA Barcode Equipment for North Grand Ramp

Pursuant to your request for pricing on specific products and services, Traffic and Safety Control Systems, Inc., is pleased to provide the following breakdown for a TIBA parking access and revenue control system (PARCS) solution replacing the outdated magnetic stripe technology equipment.

This proposal provides the City of Lansing with a PARCS solution for North Grand Ramp complete with hardware, Traffic and Safety hosted software and server in the cloud, installation labor, training and a 2-year parts and labor warranty.

The system is fully PCI-DSS compliant and the credit card processing is using Point to Point Encryption (P2PE).

Traffic and Safety Control Systems, Inc. is pleased to present cloud hosting solutions model as an alternative to the traditional client server model found across much of the parking industry today.

We believe that the City of Lansing would benefit from hosting your PARCS solution in the Amazon Web Services cloud. AWS provides: greater security, redundancy, high availability and instant scalability which a client server based model cannot offer.

Snapshot of what TSCSI is proposing:

- Create and provide a standalone cloud managed network for the North Grand Parking Ramp.
- Provide Secure, Cloud Hosted Instances of all required Virtual Machines for the PARCS for a 3 year Term.
- Maintain Security and Network Integrity on behalf of The City of Lansing, providing secure access to management consoles via DMZ and encrypted channels. Provide extensive intrusion detection and prevention technology, content filtration and advanced logging technologies.

Our most recent project is for the State of Michigan's Department of Technology Management and Budget which is currently hosted by Traffic and Safety Control Systems Inc in the AWS Cloud. This project was designed for the Cloud from the beginning.

Notes:

- Owner shall provide an internet connection which shall include a publicly routable IPv4 internet address. This connection shall not be filtered, both in-bound and outbound traffic. (TSCSI is providing a firewall)
- It is assumed that the facility has adequate electrical capacity to support the proposed equipment.
Traffic & Safety Control Systems, Inc.

TIBA BAR CODE SYSTEM

<table>
<thead>
<tr>
<th>NORTH GRAND RAMP</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) MP 30 Ticket Dispenser</td>
<td>$8,555.00</td>
<td>$17,110.00</td>
</tr>
<tr>
<td>(7) Transcore AVI Reader</td>
<td>$3,800.00</td>
<td>$26,600.00</td>
</tr>
<tr>
<td>(4) Transcore AVI Reader Card Only/Nested</td>
<td>$6,372.00</td>
<td>$25,488.00</td>
</tr>
<tr>
<td>(5) SW 30 Exit Verifier w/ P2PE CC</td>
<td>$11,678.00</td>
<td>$58,390.00</td>
</tr>
<tr>
<td>(5) APS 30 Pay on Foot, Cash, Coin and P2PE CC</td>
<td>$35,712.00</td>
<td>$178,560.00</td>
</tr>
<tr>
<td>(1) CT20 Controller</td>
<td>$3,108.00</td>
<td>$3,108.00</td>
</tr>
<tr>
<td>(1) TMS Smart Park Software Facility Parking Management</td>
<td>$11,207.00</td>
<td>$11,207.00</td>
</tr>
</tbody>
</table>

- Count, Access, Revenue, Credit Card
- Validation Sticker system

Equipment, Hosting and Licensing:

- AWS Cloud Hosting Solution for all PARCS Virtual Machines, 3 Year Term
- Cisco Meraki Advanced Security License 3-Year Term
- Cisco Meraki vMX Appliance (AWS) 3-Year Term
- Cisco Meraki Security Appliance
- 16 Port Managed, PoE Gigabit Ethernet Switch

<table>
<thead>
<tr>
<th></th>
<th>Total Equipment</th>
<th>3 Year Hosting Service</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$320,463.00</td>
<td>$27,000.00</td>
<td>$35,800.00</td>
</tr>
</tbody>
</table>

Options to be reviewed:

- Work Stations Licenses | $1,670.00 each
- Hang Tags | $19.30 each
- 3rd party API's | TBD
- Chaser coupon Validation System | $1,500.00
- Online Validation System (5 user) | $3,150.00
- Intercom System | TBD
- Recycling cash in Pay-on-Foot | $7,860.00
- Spare Vaults and Cassettes | TBD
- TIBA Safe Store and Forward CC | $3,575.00
- Hotel Systems/Valet | TBD
- Third Party Reservation Systems | TBD

Installation to include the following:

- Remove existing equipment.
- Saw cut and install vehicle detection loops, if necessary.
- Mount all control equipment.
- Pull necessary control wires and terminate all wires.
- Final tune-in and checkout of control system.
Traffic & Safety Control Systems, Inc.

- Two-year warranty covering all parts and labor warranty to repair or replace defective parts due to normal wear and tear. Acts of God, vandalism, or misuse is not covered.
- Unlimited training on site

Notes:
- All power shall be brought to the gate location by others. It shall be a system that meets NEC standards.
- All signing for traffic control shall be provided and installed by others.
- All conduits for power and control wiring shall be provided and installed by others.
- All concrete islands and/or mounting pads shall be provided and installed by others. This includes concrete filled protective barrier posts.
- Site preparation shall be done by others according to layout drawings supplied by Traffic & Safety if applicable.
- This quote is valid for 90 days.
- Terms are 50% deposit with order; Balance is net 30 days after installation. A 1-3/8% per month finance charge will be added to all invoices older than 30 days.
- CAUTION: This equipment is for automobiles only. Clearly marked alternate paths must be provided for motorcycles, bicycles, and pedestrians.

Thank you for the opportunity to quote.

Jeffrey E. Timar
Traffic and Safety
MEMORANDUM

To: Tom Bradfish, Light & Breuning
From: Chad Gamble, Parking Manager
Subject: Request for Quotes for PARCS equipment
Date: August 27, 2018

The City of Lansing Parking Services Office will be purchasing new PARCS equipment in the next few months. We are requesting a quote for the following equipment listed below. The system that will be purchased will be hosted by the vendor. Please include installation costs, set-up and anything that necessary to include to make PARCS equipment functional. Please send the quote back via e-mail Chad.Gamble@lansingmi.gov and Traci.Shell@lansingmi.gov

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- Count System: 1

Thank you.

Chad Gamble, Parking Manager
City of Lansing, MI

Parking Access Revenue Control Quotation

September 11, 2018
City of Lansing

Letter of Transmittal

September 11, 2018

Mr. Chad Gamble
City of Lansing Economic Development and Planning
Parking Services Office
219 N. Grand Avenue
Lansing, MI 48933-1317

RE: RFQ Parking Access Control Solution

Chad:

Thank you for the opportunity to submit our proposal to furnish, install and support an advanced automated parking access and control system for the City of Lansing, MI. Our proposal has been thoughtfully engineered to efficiently and creatively apply the newest technologies for the benefit of all stakeholders who use the City of Lansing parking facilities. Through this proposal, we will demonstrate our passion to deliver best practice solutions. Should you have any questions please do not hesitate to contact me at 800-947-4064.

Light & Breuning, Inc.

Tim W. Breuning, President

Encl.
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1. Company Overview and Executive Summary

Business Organization
Light & Breuning, Inc. is a closely held company established as a sole proprietorship in 1953, incorporated in Indiana in 1984, and registered with and authorized to do business in the state of Michigan since 1995.

Tim Breuning, President
Light & Breuning, Inc.
912 Lawrence Drive
Fort Wayne, IN 46802
(800) 947-4064 Office
(260) 422-6457 Fax
Tbreuning@lbpark.com
Website: lbpark.com

Light & Breuning, Inc. has been in business since 1953 and has an excellent credit rating.

Light & Breuning, Inc. specializes in the design, integration, installation and service support of automated parking, access and revenue control systems of parking facilities throughout Indiana and Michigan. The company has accumulated an impressive customer list of over six hundred completed installations for a diverse clientele. Our customers, end users and general contractors will verify that Light & Breuning, Inc. has completed every project it has started meeting or exceeding the specifications and service requirements.

Skill sets within the team include; project management, system engineering, system integration, site layout, wireless communications, revenue control systems, access control systems, barrier gate systems, VoIP systems, vehicle detection, vehicle counting and dynamic sign systems. The company provides project management, field installation, training, and system support with direct employees. To provide the best support to our customers, Light & Breuning, Inc. offices, repair center and parts depot are centrally located in Fort Wayne, Indiana.

Selected list of PARCS system manufacturers listed below.
City of Lansing

1. Company Overview and Executive Summary - Continued

Diversity and Inclusion Policy:

Equal Employment Opportunity

It is the Company’s policy that equal employment opportunities be available to all without regard to race, sex, age (within statutory limits), color, religion, national origin, citizenship status or disability. This policy applies to all employees and applicants for employment and in all phases of employment including hiring, placement, promotion, demotion, transfer, recruiting, advertising, and treatment during employment, rates of pay or other forms of compensation, selections for training and termination of employment.

The Company will take appropriate steps to provide reasonable accommodations upon request to qualified individuals with disabilities so long as doing so does not cause an undue hardship. Violations of the Company’s Equal Employment Opportunity Policy will not be tolerated and will result in appropriate discipline, up to and including discharge. If you believe this policy has been or is being violated, you must report the violation immediately to the President or any other representative of management.

Anti-Harassment Policy

Included in our commitment to provide a workplace free of job-related discrimination is a prohibition against on-the-job harassment of any employee because of the employee’s race, sex, religion, age, national origin, citizenship status or disability. Employees have a right to work in an environment free of harassment.

Harassing conduct may include, among other things, (1) epithets, slurs, stereotyping or threatening, intimidating or hostile acts that relate to race, sex, age, religion, national origin or disability; and (2) written or graphic material that denigrates or shows hostility or aversion toward an individual or group because of race, sex, age, religion, national origin or disability. The Company is committed to protecting employees from such harassment whether from other employees or non-employees.

Included in the Company’s commitment to provide a workplace free of job-related discrimination is a prohibition against sexual harassment. Sexual harassment includes but is not limited to:

- Unsolicited and unwelcome verbal comments or jokes and physical gestures or actions of a sexual nature toward another employee (for example, touching, patting, pinching, indecent exposure or profane jokes);
- Unsolicited and unwelcome demands or requests for sexual favors or social or sexual encounters;
City of Lansing

1. Company Overview and Executive Summary - Continued

Diversity and Inclusion Policy (Continued)

- The explicit or implicit promises of preferential treatment with regard to an individual's employment in exchange for sexual favors or sexual activity; or

- The use of an employee's or applicant's submission to or rejection of such conduct as the basis of an employment decision (e.g. hiring, firing, promotion, demotion, compensation, benefits or working condition).

The Company will hold all levels of supervision responsible for monitoring and complying with Company practices and procedures for the handling of employee complaints about harassment and other discrimination. Employees who believe they are victims of harassment or other discriminatory conduct are encouraged and have a responsibility to seek help. Sexual harassment and other discriminatory conduct should be reported immediately to the President or any other representative of management. Such reports will be treated in a confidential way as is appropriate, and no adverse action will be taken against any employee because he or she reports discrimination or harassment. All employees are assured that quick action will be taken to resolve complaints and that the Company is firm in its commitment to eliminate such conduct from the workplace.

The Company will not tolerate discriminatory conduct. Such conduct may result in disciplinary action up to and including discharge. Help us create a work environment free from discrimination of any sort.
City of Lansing

1. Company Overview and Executive Summary - Continued

- Executive Summary

Our total solution, will deliver a system which will meet the parking requirements of the City of Lansing for many years to come and will equip them with the flexibility to accommodate future expansions and functionalities. This proposal will demonstrate the unique and significant VALUE that is created by the team of Light & Breuning, Inc. and DESIGNA for the benefit of all stakeholders. Designa has successfully completed installations for over 6,000 global sites.

FUTURE PROOF – The ABACUS system features industry standard architecture with a single control server for all system operations. This single server operation provides for ease of back up and upgrade in all situations. No area computers or intermediary computers are required to control the system. The ABACUS system solution uses native TCP/IP communication between all devices and world standard architecture from Microsoft to deliver a true best practice solution.

EASE OF INTEGRATION – The ABACUS system is “future proof” by virtue of its Web Services module that is the application program interface (“API”) for unlimited third party integrations that can enhance the “customer experience” i.e. reservations, frequent parker programs, space availability via the WEB and mobile apps, mobile payments, and many more.

FLEXIBILITY - We have proposed a core system based on central stripe magnetic stripe technology, known as ABACUS from DESIGNA of Germany www.designa.com. We recommend the use of magnetic stripe technology for multi-user applications where wide ranging functionality is required for security, multi-level discounting, and the ability to rewrite multiple times. A barcode system can be installed if preferred, however, this is not recommended by us for a busy parking environment.

TRANSITION – The Light & Breuning, Inc. team understands the site requirements, conduit layouts, electrical panels, and most importantly the requirement for extraordinary care of the parking patron. Our team will hit the ground running and meet the milestones for each phase without delay, loss of parking revenue, or inconvenience to parking patrons.
2. Professional Qualifications

Light & Breuning, Inc., key personnel supporting the City of Lansing will include:

- **Tim Breuning, Sales Relationship Manager**
  25 years’ experience
  Tim will be responsible for customer communication, project meetings, documentation, and general support of the project.
  Phone: (616-233-0785)
  Email: tbreuning@lbpark.com

- **John Potter, Project Engineer Indiana Based**
  21 years’ experience
  Level 3 Designa certified
  John will be responsible for engineering the product application and overseeing the installation.
  Phone: (616-233-0785)
  Email: jpotter@lbpark.com

- **Steve Bell, Project Engineer Michigan Based**
  31 years’ experience
  Steve will be the on-site project manager coordinating installation forces, handling weekly project meetings and manufacturer liaison.
  Phone: (616-233-0785)
  Email: sbell@lbpark.com

- **Jonathan Porter, Project Engineer Indiana Based**
  5 years’ experience
  Level 3 Designa certified
  John will be responsible for engineering the product application and overseeing the installation.
  Phone: (616-233-0785)
  Email: jporter@lbpark.com

- **Gerry Saam, Product Support Indiana Based**
  1 years’ experience
  Level 1 Designa certified
  Gerry will be responsible for product support
  Phone: (616-233-0785)
  Email: gsaam@lbpark.com
2. Professional Qualifications - Continued

- **Aaron Fare, Product Support Michigan Based**
  1 years’ experience
  Level 2 Designa certified
  Aaron will be responsible for product support.
  Phone: (616-233-0785)
  Email: afare@lbpark.com

- **Matt Storer, Product Support Michigan Based**
  1 years’ experience
  Level 1 Designa certified
  Matt will be responsible for product support
  Phone: (616-233-0785)
  Email: mstorer@lbpark.com

- **Audrey Marks, Service Coordinator**
  5 years’ experience
  Audrey will be responsible for service requests
  Phone: (800)947-4064
  Email: amarks@lbpark.com

- **Lisa Shoup, Materials/Contract Manager**
  16 years’ experience
  Lisa will be responsible for contract administration and purchasing/inventory of all system components.
  Phone: (616) 233-0785
  Email: lshoup@lbpark.com

- **Brian Sorg, IT Engineer**
  18 years’ IT experience
  Brian will be responsible for network communications and network security.
  Phone: (616-233-0785)
  Email: bsorg@lbpark.com
City of Lansing

2. Professional Qualifications - Continued

- **Safety Plan**
  Light & Breuning, Inc. will provide a safe work crew and observe the following:
  - All on-site employees will be OSHA 10 certified and their supervisor will be OSHA 30 certified.
  - All on-site employees will be identified with uniform shirts and/or jackets with company name displayed.
  - All on-site employees will wear high visibility vests when working.
  - All on-site employees will observe lock out \ tag out procedures.
  - Each work area will be demarcated with traffic cones and barricades during actual field work.
  - All vehicles will be identified with company logos.
City of Lansing

3. References and Experience

- **Fort Wayne International Airport** (22 lanes)
  Located at: 3801 W. Ferguson Road, Fort Wayne, Indiana
  Contact reference: Stan Klepper, Chief, Public Safety Dept. (260)747-4146
  e-mail Klepper@fwairport.com
  Project completed: December 2016

- **Purdue University** (2 garages)
  Grant Street Garage (6 lanes, 1,320 spaces),
  Located at: 120 N. Grant St., West Lafayette, IN 47907
  Contact reference: Holly Buskirk, (765)494-9493
  e-mail haalexander@purdue.edu
  Project completed: January 2017

  Harrison Street Garage (6 lanes, 862 spaces)
  Located at: 433 Harrison St., West Lafayette, IN 47907
  Contact reference: Holly Buskirk, (765)494-9493
  e-mail haalexander@purdue.edu
  Project completed: July 2017

- **Battle Creek, MI** (2 garages)
  Hamblin Ave. Garage (6 lanes, 162 spaces)
  Located at: 40 West Hamblin Ave. Battle Creek, MI 49017
  Contact reference: Tim Warren, Systems Manager, (269)966-3605
  e-mail twarren@abm.com
  Project completed: April 2016

  Michigan Ave. Garage (6 lanes, 700 spaces)
  Located at: 80 West Michigan Ave, Battle Creek, MI 49017
  Contact reference: Tim Warren, Systems Manager, (269)966-3605
  e-mail twarren@abm.com
  Project completed: July 2017

- **Plaza Towers, Grand Rapids, MI**
  201 West Fulton Street, Grand Rapids, MI 49503
  Contact reference: Brent Parmeter, (616)-242-6602, bparmeter@eenhoorn.com
  Designa Blue Edition - magstripe
  Completed: 2/2018

- **Gerald R. Ford Airport, Grand Rapids, MI**
  5500 44th Street SE, Grand Rapids, MI
  Contact reference: Dan Villalobos, (616)-233-6073, dvillalobos@gr.org
  Designa Blue Edition – Magstripe
  Projected Completion: 11/2018
4. **Product Solutions Proposed / Meeting of Technical Specifications/ Timeline**

Light & Breuning, Inc. is the authorized distributor for Designa Access Corporation for Indiana, Michigan and Ohio and proudly presents their solution for the City of Lansing. We recommend the following equipment and features:

- **Blue Edition Plus Entry – Exit Terminal Standard features:**
  - Barcode or magnetic stripe
  - PCI/PA – DSS/EMV ready reader
  - 2D QR reader for pre-booking-mobile pay
  - Internal HID proximity reader
  - VoIP intercom
  - Linux device code
  - Energy saving mode
  - Lost ticket button
  - Receipt button

- **Abacus Automatic Pay Stations**
  Barrier-free automatic Pay Station for all car park payment process - various options enable adaption to all customer requirements
  - Wheelchair accessible controls
  - Processing tickets and cards with magnetic strips or barcodes
  - Payment of short term parker tickets incl. discount processing
  - Renewal and additional payment of season parker cards
  - Charging and additional payment of debit cards
  - Coin processing, country and client-specific
  - Banknote processing (optional), country and client-specific
  - Banknote return (optional)
  - Bill recycler
  - Lost ticket button
  - Receipt printer for issuing receipts using thermal printing technology
  - TFT color display (15") available
  - VoIP Intercom device
  - Ethernet connection
City of Lansing

4. Product Solutions Proposed / Meeting of Technical Specifications/ Timeline - Continued

- **Abacus Pay-In-Lane**
  - Processing tickets and cards with magnetic strips or barcodes
  - Payment of short term parker tickets incl. discount processing
  - Renewal and additional payment of season parker cards
  - Charging and additional payment of debit cards
  - Coin processing, country and client-specific
  - Banknote processing (optional), country and client-specific
  - Receipt printer for issuing receipts using thermal printing technology
  - TFT color display (10.4") available
  - VoIP Intercom device
  - Ethernet connection

- **Abacus Parking Management Software Standard features:**
  - Uses MS-SQL database
  - PA-DSS compliant
  - Alerts via texting and Email are sent when facility is full, broken equipment or ticket jams and outages
  - Web-based reports accessible from internet with proper credentials
  - User friendly graphical user interface
  - Fully editable security features
  - Real time reporting

- **Reliability**
  - The DESIGNA solution derives its reliability from the basis of design. Significant design features and competitive advantages are evident including:
    - The Designa software features a WEB services interface that allows for easy integration of third party solutions such as credential updates, general ledger interfaces, mobile payment platforms and many others.
    - The Designa software is scalable to meet the unique needs of each customer. Applications are available for a single site server, a central server via a VPN or the ASP Private Cloud Solution.
    - The Designa solution communicates with the server using TC/PIP Ethernet based communication. IT professionals recognize this standard as the most reliable communication protocol.
City of Lansing

4. Product Solutions Proposed / Meeting of Technical Specifications/ Timeline - Continued

- **Reliability - Continued**
  - The Designa solution is available in magnetic stripe, barcode, RFID, or mobile formats. The broad spectrum of Designa solutions challenges the one size fits all philosophy of less qualified solutions.
  - The heart of each revenue device is the Multicon. This key component is standard to all entry and exit terminals as well as all fee computers and automated pay stations. This common platform enables simple and economical parts servicing. The Multicon is designed with self-diagnostics to assist with servicing. The Multicon includes a self-sharpening blade to cut each ticket.
  - The magnetic stripe feature is the most flexible and reliable format. Designa encodes the magnetic stripe ticket using an algorithm that ensures a readable ticket even if portions or the encoding have been damaged by moisture or patron abuse. The magnetic stripe feature allows for four ways read capability regardless of how the ticket is presented in the exit terminal or automated pay station.
  - The Designa Blue Edition Plus terminal faceplate has been designed to integrate standard features including VoIP intercom, HID proximity access card reader, 2D QR barcode reader and EMV reader. All of these functionalities are presented in one clean faceplate. Nothing hangs on the side as an add-on box.
  - The Designa barrier gate operator is a direct-drive unit with a DC motor. The direct-drive design eliminates the gear box, belts and limit switches of older designs ensuring a very reliable and smooth running gate operator.
  - Credit cards are processed by EMV readers certified to provide end-to-end encryption ensuring compliance with rigorous PCI standards.

- **Project Timeline**

Light & Breuning, Inc. recognizes that customer service, public safety, may require changes in the proposed sequence. The presentation of the sequence below is merely to represent that we have given thought to the best approach; however, we are mindful of the need to adjust to customer and location priorities as necessary. Project duration is 11 weeks after receipt of order.
City of Lansing

4. Product Solutions Proposed / Meeting of Technical Specifications/
Timeline – Continued

- **Award Contract/Kickoff Meeting**
  One week

- **Submittals**
  One week

- **Order and Receive Equipment**
  Four weeks

- **Configuration & testing**
  Two weeks

- **Mobilization, bolt down equipment**
  Two Weeks

- **Test & Acceptance**
  One Week
City of Lansing

4. Product Solutions Proposed / Meeting of Technical Specifications/

- **Work by others**
  - Level concrete curb for mounting of equipment at each lane and/or POF location.
  - Conduit and electrical service at 20 AMPS, 110 VAC per lane
  - Bollards to protect PARCS equipment.
  - Informational or directional signage.
  - Network connections from FMS server to each lane and APS location.
  - Firewalls and High speed Internet connection to FMS server.
  - Data backup for server.
  - Information to program parking rates, validation accounts, etc.
  - Remote access is required for software support.
  - Operational supplies including parking tickets, cards, and signage.
  - Key system operator to assume responsibility for system knowledge.
  - CCTV to monitor activity in and around the traffic lanes.

- **Progress Meetings**
  Light & Breuning, Inc. will meet weekly with the customer representative from award and during actual field installation.

- **Job Site Clean Up**
  Light & Breuning, Inc. will maintain a clean job site at all times and observe the following:
  - All cartons and installation generated trash will be disposed of off-site.
  - All existing equipment that is removed will be disposed of offsite.
  - Each work area will be swept and inspected before reopening for vehicle traffic.
4. Product Solutions Proposed / Meeting of Technical Specifications / Timeline – Continued

- **Deliverables**
  Within 1 day of notice of award, Light & Breuning, Inc. will provide the following deliverables;
  - Certificate of Insurance
  - Product specifications
  - System Schematic drawings
  - Equipment layout drawings
  - Training syllabus
  - Operational test plan
  - Custom graphics mock up
  - Customer artwork for ticket printing
  - Product manuals (5) product manuals

Within 5 days of notice of award customer site information is requested to program the system and prepare for staging and commissioning.

- **Commissioning Plan**
  - The purpose of commissioning is to assemble, program, and test all components (ticket dispensers, automated pay stations, fee computers, card readers, server and various integrated accessories) as a unified system prior to field installation. The result is a system that is more stable and speeds up the field installation process.
  - Step one is to program the DBS server with the customer and site specific information including credit card processing.
  - Step two is to receive the equipment on-site for uncrating and inspection to verify quantities, inspect for damage, and confirm firmware versions.
  - Step three is to connect each device to the network and test as a system.
  - Step four is to demonstrate the system to the customer.
  - Step five is to use the assembled system to deliver the first module of training.
  - Upon completion of the commissioning process, each device is labeled, disconnected, and returned to the factory shipping carton for the short transport to its intended location.

- **Training**
  Light & Breuning, Inc. will coordinate and deliver 40 hours of training, ten (10) hours before installation begins, twenty (20) hours of GO LIVE training, and ten (10) hours refresher training within thirty (30) days after acceptance with the City of Lansing.
5. Warranty

- **Service and Support**
  - Light & Breuning, Inc. will provide pro-active service support for the City of Lansing.
  - Standard service hours are Monday – Friday 7:00 AM to 7:00 PM.
  - Emergency after hours support is available 24/7 at prevailing rates.
  - Preventative maintenance will be performed once each quarter on every device to ensure maximum performance. Before each preventative maintenance inspection, our Designa certified technicians will consult with the local manager to identify areas of concern or reported issues. The preventative maintenance inspection will address all reported issues as well as inspection of each device, cleaning of ticket paths, adjustments, and calibration of safety devices. Additional training will be offered during each preventative maintenance visit.
  - Most customer requests are for software support. The most expeditious delivery method for software support is via remote access. Our technicians are equipped with Tablets with wireless communication to remote into authorized sites and provide immediate mobile support.
  - Our technicians will provide two hour on-site hardware support. Each service vehicle is stocked with specialized diagnostic tools and spare parts.
  - Our service team is backed up by six Designa factory service engineers providing remote software support and on-site support from their Oak Brook Illinois service center.
  - Light & Breuning, Inc. is a member of the PARC Group that shares technical support resources and over 32 Designa certified technicians.

- **Emergency Service**
  - After hours, on weekends or holidays preferred method to request emergency service is through our website: www.lbpark.com or via telephone, and follow voice mail instructions to leave an emergency request and a technician will return your call.

- **Limited Labor Warranty Exclusions**
  Light & Breuning, Inc., warrants that it will provide field labor at the customer site during normal business hours Monday through Friday excluding holidays to service the factory warranty described above for a period of ONE YEAR from the date of substantial completion and system start up.
  - Quarterly preventative maintenance is included during the warranty. The preventative maintenance scope of work includes labor and perishable supplies to clean, adjust, and calibrate all systems and sub-systems for peak performance.
5. Warranty – Continued

- **Limited Manufacturer Warranty**
  - Designa warrants that its products will be free from any defects in material and workmanship under normal use and service, wear and tear excepted, for a period of TWO YEARS from the date of shipment. This warranty shall not apply to products which have not been properly maintained or have been subject to misuse, neglect, accident or damage, or which have been modified, changed or reworked in any way. There are no other warranties, expressed or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. In no event shall we be liable for any loss of profits or any indirect or consequential damages arising out of breach of this warranty or any other term or condition.

- **Extended Service Agreement**
  - Standard service hours are Monday – Friday 7:00 AM to 7:00 PM. Emergency after hours support is available 24/7 at standard rates with no penalty.
  - Preventative maintenance will be performed once each quarter on every device to ensure maximum performance. The preventative maintenance inspection will be performed by Designa certified technicians and will address all reported issues and inspection of each device, cleaning of ticket paths, adjustments, and calibration of safety devices. Additional training will be offered during each preventative maintenance visit as needed.
  - Remote software support. Our technicians are equipped with Tablets with communication to remote into authorized sites and provide immediate mobile support.
  - Our local based technicians provide same day on-site hardware support. Each service vehicle is stocked with specialized diagnostic tools and spare parts.
  - Spare parts and perishable supplies are stocked locally.
## City of Lansing

### 6. Cost Proposal

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Extension</th>
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<tr>
<td>77-0018</td>
<td>WS120 Remote Workstation</td>
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<td>21.5&quot; LED Monitor</td>
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<td>77-0196</td>
<td>Blue Edition Barrier Gate</td>
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<tr>
<td>77-0049</td>
<td>10' Folding Arm, ADA</td>
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<td>PX Credit Card Reader</td>
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<td>Bolt down, terminate and test equipment</td>
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<td>11</td>
<td>System commissioning, testing of credit card</td>
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<td>One-Year On Site Service Warranty</td>
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<td>Freight</td>
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Subtotal  $ 333,790.00
Sales Tax
Total this quote $ 333,790.00
6. Cost Proposal - Continued

HOSTING SERVICE FEES:
Separate hosting agreement between HOST and customer is required. Hosting fees will be $75 per TCC per Month = $1,275 per month.

OPTIONAL ITEMS:
1. Designa VoIP Central Server and one (1) Main Phone Point ...ADD: $1,919
2. WEB-VAL Online Validation Application...ADD: $3,631
3. Barcode Scanner for Chaser Ticket Creation...ADD: $6,406
4. QR Validation Email/Printing...ADD: $3,113
5. Table Top Barcode Validator...ADD: $1,401

SEE NOTES SECTION OF PROPOSAL FOR ADDITIONAL ITEMS

This Quotation expires on December 11, 2018.
6. Notes

Our proposal includes the following notes.

- Concrete, conduit, A/C power, high speed Ethernet connection to each device, secure rack mount location for router, firewalls, by owner. Owner to provide adequate power and cooling for the room where the PARCS server rack is to be located.
- Existing proximity card readers and credentials will be integrated into the new system.
- EMV ready credit card readers furnished with each revenue device. Credit card processing by Payment Express. Fees and contract apply.
- Tickets, receipt paper and other perishables included for demo only.
- Price on base proposal and options good until December 11, 2018.
City of Lansing

Value Engineering Recommendations

Light & Breuning, Inc. is pleased to provide a menu of value engineering recommendations that will provide opportunities to save money and add features. Pricing for each item is displayed on the cost sheet.

- **WEB validation**
  Web application for allocating validations to ABACUS short term parker tickets with magnetic strip or barcode technology. Allocated validations are saved in the System server. During the payment process at the manual or automatic pay station or directly at the exit, the saved validations are retrieved from the System server and deducted from the incurred parking fee.

- **Desktop validators**
  Compact offline discount unit for coding magnetic validations.

- **Voice Annunciation**
  Customized voice message at entry and exit.

- **Walk up Automatic Pay Station with recycler and coin handling**
  Barrier-free automatic Pay Station for all car park payment processes.

- **Pay in Lane with recycler and no coin handling**
  Automatic Pay Station in compact design for all car park payment processes.

- **Chaser Ticket**
  Designa offers the ability to grant validations using a chaser ticket.

- **Driver Camera**
  A camera can be installed at the entry and exit terminals to ensure network-based video surveillance.

- **Mobile Payment Options**
  Designa offers a web services interface for many mobile payment options and is willing to develop as necessary.

- **Graphics On Customer Facing Terminals**
  This option provides custom graphics on the face each self-service entry or exit terminal to provide patrons with information and guidance.

- **Surface Mount Bollards**
  Some equipment islands have been observed to be missing bollards to protect the equipment.
8. Value Engineering Recommendations – Continued

- **Spare Parts**
  Stock parts for on-site swap.

- **UPS**
  Uninterruptible Power Supplies, critical entry and exit lanes can be assured of operation in the event of a power failure by installing a UPS unit. Duration depends on cold weather conditions but can be expected to range from (4) to (12) hours per lane.

- **Handheld Event System**
  I-Phone based system accepts credit cards and prints a receipt.

- **WEB Services**
  Designa offers the WEB services option allowing integration of data to other software platforms at the API level.