Gerald R. Ford International Airport

Grand Rapids, Michigan

Airfield Maintenance Building Expansion – Part 1

BID REFERENCE #2621

ADDENDUM #3

JUNE 23, 2026

To All Holders of Contract Documents:

Your attention is directed to the following interpretations of, changes in, and additions to the Contract Documents for the above-referenced project. All bid adjustments caused by the content of the Addendum shall include the cost of materials and labor related to the items herein and for any subsequent adjustments to the contract documents to accommodate the work stated herein.

Contractors shall be responsible for the full context of changes, interpretations, and clarifications to both the drawings and specifications and shall take the same into consideration when preparing their bids. Indicate receipt of this Addendum in the space provided within the Proposal.

This addendum consists of 1 drawing, an updated spec, and updated bid sheet as attachment(s).

CLARIFICATIONS

1. Q: Confirm whether existing lighting-control integration/startup is required for Avion controls and who performs it.
    i. Is expectation to reuse existing controllers?
        a. Correct
    ii. Is existing wireless or wired?
        a. It is a wireless system (mesh) will integrate with the mesh system that's out there. We will make sure appropriate controls are included. This is the one now out for bids. Commissioning done by 3rd party (Brightline – involved in previous site projects).
    iii. Will new (if needed) need to be wireless or wired?
        a. It is a wireless system (mesh) will integrate with the mesh system that's out there. We will make sure appropriate controls are included. This is the one now out for bids. Commissioning done by 3rd party (Brightline – involved in previous site projects).
2. Q: Confirm existing video platform/VMS, approved camera manufacturer/model, licensing, network switch/PoE/wireless requirements, and whether Ubiquiti is mandatory or only a power-supply basis.
    i. Why we are asking: the drawings identify wireless cameras and Ubiquiti power supplies, but the spec requires a complete operating IP video system with programming and interface testing. In proposal callout: to be supplied with cameras and receivers by owner (GRR). OR, what are the cameras and specific items needed?
        a. GFIAA uses Genetec for its VMS, and Axis brand cameras.
        b. Ubiquiti is an example of a wireless solution, but other products may be acceptable for use.

ii. - C-375 IFB Specifications_TLF Certified 1.pdf, page 34, line 1439: item 70, 282000-1, video surveillance, 1 LS.
iii. - C-375 IFB Specifications_TLF Certified 1.pdf, page 545, lines 22426-22427: video surveillance interfaces with access control and building intrusion detection.
iv. - C-375 IFB Specifications_TLF Certified 1.pdf, page 546, line 22477: video surveillance system.
v. - C-375 IFB Contract Drawings_TLF Certified 1.pdf, sheet EC001 / page 32 of 33, lines 7095-7100: new swivel wireless security camera on light pole; install Ubiquiti power supply and coordinate with security vendor.
vi. - C-375 IFB Contract Drawings_TLF Certified 1.pdf, sheet EC001 / page 32 of 33, lines 7103-7110: rooftop receiver tied back into main building security network; coordinate with security vendor.

3. Q: Confirm shutdown/outage windows for tying into existing site lighting, panel LPA, transformer/service, and security network, including whether off-hours work is required and compensable.
    i. Is there an initial detailed proposed phased timeline (with tie in times)? What is the expected tie in times? during night? on weekends? Staged or full blackout?
        a. *The Airport has confirmed that they can operate on the emergency generator for up to 4 hours. Coordination with Consumers on required downtime will be needed for main service. Panel LPA shall have minimal downtime. Site lighting is not critical at this site, downtime should be kept to as minimal as possible but maintained lighting for specific durations is not required. Security network outages shall be coordinated with Ashley Allers (Contact provided above)*
4. Q: Confirm whether one escort could support 2 or more contractors in one area? Or must you have one escort per contractor?
        a. *A badged individual with escort privileges must maintain control of all personnel at all times and must be within range to control. Generally, 3-5 escorts per badged individual is recommended.*
5. Q: Is there a DBE participation goal?
    i. If so, could you please provide DBE form?
        a. *No, there are not any DBE participation requirements.*
6. Q: Confirm whether Buy American / BABA applies to C-375 electrical, lighting, video/security, and utility materials, and provide any required forms if applicable.
    i. Does the buy American apply to cameras, specifically? Ubiquiti we believe is manufactured in China
        a. *Buy America/BABA does not apply.*
7. Q: Can you confirm that line 66 are the boxes for the line item 67 weatherproof receptacles and not in grade boxes?
    a. *Line 66 represents any junction boxes or in grade boxes needed to complete work. Line 67 only refers to receptacles.*
8. Q: On sheet ES001 note 3 says that consumers energy will be responsible for the service feed. Can line 64 be an allowance item with a set dollar amount in lieu of a per/foot pay item as these costs are unknown.
    a. *The contractor shall carry an allowance of 6,768 for consumers' wire and 16,640 for conduit/trenching. This will be paid out in the form of a lump sum to consumers when services are complete.*
    b. *Please reach out directly to Scott Shrauger at SCOTT.SHRAUGER@cmsenergy.com (Phone: 616-402-5992) for any Consumers Energy related questions*
9. Q: Per addendum #2, you clarified that Consumers Energy is handling the installation of the new primary feeders. The bid form still has a unit price for this item as line item #64. This would need to be an allowance item? Also the addendum referenced that the feeders are direct buried.

Wouldn't that eliminate line item #65?

   a. *The contractor shall carry an allowance of 6,768 for consumers' wire and 16,640 for conduit/trenching. This will be paid out in the form of a lump sum to consumers when services are complete.*
   b. *Please reach out directly to Scott Shrauger at SCOTT.SHRAUGER@cmsenergy.com (Phone: 616-402-5992) for any Consumers Energy related questions.*

10. Q: Could you please send over the bid document in an excel format?
    a. *Excel file has been included in this addendum.*
11. Q: I noticed the bid form references that we should have an excel file for the bid form. Are you able to please send this to me? I can't seem to find it in what I have received or what is on the OneDrive.
    a. *Excel file has been included in this addendum.*

DRAWINGS

1. **REPLACE** Drawing GI002 with **REVISED** sheets provided with this addendum. Revisions are denoted with a cloud referenced to Addendum 3 dated 6/23/2026.

END OF ADDENDUM NO. 3

C&S ENGINEERS, INC.

Attachment A: Contract Drawings

(Replaces GI002)

	SHEET NO.	SHEET REFERENCE	TITLE
1	01	GI001	TITLE SHEET
1	02	GI002	QUANTITIES FOR CANVASS OF BIDS AND SHEET INDEX
	03	GI003	LEGEND AND SURVEY CONTROL POINTS
	04	GI004	GENERAL NOTES
	05	GI101	GENERAL PLAN
	06	GC100	CONSTRUCTION SAFETY PHASING PLANS - OVERALL PLAN
	07	GC101	CONSTRUCTION SAFETY PHASING PLANS - PHASE 1
1	08	GC102	CONSTRUCTION SAFETY PHASING PLANS - PHASE 2
1	09	GC103	CONSTRUCTION SAFETY PHASING PLANS - PHASE 3
	10	GC501	CONSTRUCTION SAFETY PHASING DETAILS
1	11	CE101	SOIL EROSION AND SEDIMENT CONTROL PLANS
	12	CE501	SOIL EROSION AND SEDIMENT CONTROL DETAILS
	13	CD101	DEMOLITION AND EXISTING CONDITIONS PLAN
	14	CD501	DEMOLITION DETAILS
1	15	CP101	GEOMETRY AND PAVEMENT PLAN
	16	CP501	PAVEMENT DETAILS
	17	CP502	PAVEMENT DETAILS
1	18	CG101	GRADING AND DRAINAGE PLAN
1	19	CU101	SITE UTILITY PLANS
	20	CU201	UTILITY PROFILES
	21	CU202	UTILITY PROFILES
	22	CU203	UTILITY PROFILES
	23	CU204	UTILITY PROFILES
1	24	CU205	UTILITY PROFILES
	25	CU501	DRAINAGE DETAILS
	26	CU502	WATER DETAILS
	27	CU503	SANITARY DETAILS
1	28	CU601	STRUCTURES TABLE
	29	E001	ELECTRICAL NOTES AND ABBREVIATIONS
	30	ED001	ELECTRICAL SITE DEMOLITION PLAN
	31	ES001	ELECTRICAL SITE PLAN
	32	EC001	SYSTEMS SITE PLAN
	33	E501	ELECTRICAL ONE-LINE DIAGRAM AND SCHEDULES

A1 SHEET INDEX
SCALE: NOT TO SCALE

BASE BID (2026)

ITEM NO.	SPEC	DESCRIPTION	QUANTITY	UNITS
1	C-102-5.1	INSTALLATION AND REMOVAL OF SILT FENCE	1,710	LF
2	C-102-5.2	INSTALLATION AND REMOVAL OF STABILIZED CONSTRUCTION	2	EA
3	C-102-5.3	INSTALLATION AND REMOVAL OF STORM DRAIN INLET PROTECTION	11	EA
4	C-102-5.4	INSTALLATION OF RIP RAP OUTLET PROTECTION	10	CY
5	C-105-6.1	MOBILIZATION (10% MAX.)	1	LS
6	C-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	1	LS
7	P-101-5.1	PAVEMENT REMOVAL, HEAVY DUTY ASPHALT, VARIABLE DEPTH	360	SY
8	P-101-5.2	PAVEMENT REMOVAL, LIGHT DUTY ASPHALT, VARIABLE DEPTH	2,900	SY
9	P-101-5.3	PAVEMENT REMOVAL, PCC, VARIABLE DEPTH	65	SY
10	P-101-5.4	REMOVE SIDEWALK	75	SY
11	P-101-5.5	REMOVE CURB AND GUTTER	580	LF
12	P-101-5.6	REMOVE EXISTING PIPE, 36" DIAMETER OR LESS	285	LF
13	P-101-5.7	REMOVE EXISTING DRAINAGE STRUCTURE	1	EA
14	P-101-5.8	REMOVE EXISTING 8" DUCTILE IRON WATER MAIN	100	LF
15	P-101-5.9	REMOVE EXISTING SANITARY PIPE	225	LF
16	P-101-5.10	REMOVE EXISTING SANITARY STRUCTURE	3	EA
17	P-101-5.11	REMOVE, STORE & REINSTALL EXISTING FRONTAGE SIGN	1	EA
18	P-153-6.1	CONTROLLED LOW-STRENGTH MATERIAL (CLSM)	10	CY
19	F-162-5.1	CHAIN-LINK FENCE	445	LF
20	F-162-5.2	REMOVAL OF EXISTING FENCE	265	LF
21	F-162-5.3	REMOVAL OF EXISTING SLIDING VEHICLE GATE	1	EA
22	MDOT 202	TREE REMOVAL	9	EA
23	MDOT 202	ROCK REMOVAL	12	EA
24	MDOT 205	EMBANKMENT, CIP	1,450	CY
25	MDOT 205	UNCLASSIFIED EXCAVATION, STOCKPILE ON-SITE	3,000	CY
26	MDOT 205	UNCLASSIFIED EXCAVATION, DISPOSE OFF-SITE	2,440	CY
27	MDOT 205	SEPARATION GEOTEXTILE	750	SY
28	MDOT 205	GRANULAR FILL COARSE AGGREGATE	250	CY
29	MDOT 301	SUBBASE COURSE	2,800	CY
30	MDOT 302	AGGREGATE BASE	840	CY
31	MDOT 401	FLARED END SECTION	2	EA
32	MDOT 402	12 INCH - RCP CLASS III	296	LF
33	MDOT 402	15 INCH - RCP CLASS III	16	LF
34	MDOT 402	18 INCH - RCP CLASS III	328	LF
35	MDOT 403	CATCH BASIN	7	EA
36	MDOT 403	MANHOLE	1	EA
37	MDOT 403	REPLACE CATCH BASIN FRAME AND GRATE	1	EA
38	MDOT 404	6 INCH PERFORATED UNDERDRAIN PIPE	90	LF
39	MDOT 501	HMA TOP COURSE 5EML	490	TON
40	MDOT 501	HMA LEVELING COURSE 4EML	730	TON
41	MDOT 501	HMA BASE COURSE 3EML	270	TON
42	MDOT 802	CONCRETE CURB AND GUTTER	1,500	LF
43	MDOT 803	CONCRETE SIDEWALK	2,380	SF
44	MDOT 811	MARKINGS	780	SF
45	MDOT 816	SEEDING AND MULCHING	1	LS
46	MDOT 816	TOPSOIL OBTAINED ON-SITE	580	CY
47	MDOT 823	4 INCH DI WATER MAIN	80	LF
48	MDOT 823	6 INCH DI WATER MAIN	200	LF
49	MDOT 823	8 INCH DI WATER MAIN	50	LF
50	MDOT 823	4" GATE VALVE AND BOX	1	EA
51	MDOT 823	6" GATE VALVE AND BOX	2	EA
52	MDOT 823	HYDRANT, RELOCATE, CASE 2	1	EA
53	MDOT 823	8" TAPPING SLEEVE AND 8" GATE VALVE AND BOX	1	EA
54	MDOT 823	8" X 6" REDUCER	1	EA
55	MDOT 823	8" X 4" TEE	1	EA
56	MDOT 823	8" X 6" TEE	1	EA
57	MDOT 825	6 INCH PVC SANITARY SEWER	265	LF
58	MDOT 825	8 INCH PVC SANITARY SEWER	125	LF
59	MDOT 825	SANITARY STRUCTURE	5	EA
60	260505-1	DEMOLITION/SALVAGE EXISTING LIGHT POLE	5	EA
61	260505-2	DISCONNECT EXISTING UGE	1	LS
62	260505-3	AT&T DEMO VACATED LINE	1	LS
63	260519-1	NEW UNDERGROUND ELECTRICAL (INCLUDING BONDING WORK AS IDENTIFIED IN 26 0526 & ALL WORK IDENTIFIED IN 26 0529 & CONDUIT AS NOTED IN 26 0533.13 & ALL WORK ASSOCIATED WITH SECTION 26 0553 & ALL WORK ASSOCIATED WITH SECTION 26 0583)	630	LF
64	260519-2	UNDERGROUND WIRE FOR CONSUMERS ENERGY	1	LS
65	260533.13-1	CONDUIT & TRENCHING FOR CONSUMER'S ENERGY	1	LS
66	260533.16-1	BOXES FOR ELECTRICAL SYSTEMS	7	EA
67	262726-1	RECEPTACLE - EXTERIOR	7	EA
68	265600-1	SITE LIGHTING - SINGLE ARM W/ BASE	4	EA
69	265600-2	SITE LIGHTING - DUAL ARM W/ BASE	3	EA
70	282000-1	VIDEO SURVEILLANCE	1	LS
71	282000-2	HOURLY RATE FOR NORMAL WORKING HOUR CALLBACK	75	HR
72	282000-3	HOURLY RATE FOR NON-WORKING HOUR CALLBACK	75	HR

ALTERNATE 1 (2027)

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5	C-105-6.1	MOBILIZATION (10% MAX.)	1	LS
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A2 QUANTITIES FOR CANVASS OF BIDS
SCALE: NOT TO SCALE

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STATE OF MICHIGAN
RAYMOND D. MIDDLESWARTH
ENGINEER
NO. 6201070473
LICENSED PROFESSIONAL ENGINEER

GERALD R. FORD International Airport

AIRFIELD MAINTENANCE BUILDING EXPANSION (PHASE 1)

GERALD R. FORD INTL AIRPORT
GRAND RAPIDS, MICHIGAN

MARK	DATE	DESCRIPTION
2	06/23/2026	ADDENDUM 3
1	06/11/2026	ADDENDUM 1

REVISIONS

PROJECT NO:	K19.029.002
DATE:	JUNE 2026
DRAWN BY:	M. KERREBROCK
DESIGNED BY:	R. MIDDLESWARTH
CHECKED BY:	R. MIDDLESWARTH

CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WITH ANY CONSTRUCTION.

QUANTITIES FOR CANVASS OF BIDS AND SHEET INDEX

GI002

SHEET NO. 02 OF 33

Jun 22, 2026 - 8:37pm
F:\Projects\K19 - Gerald R. Ford Airport\K19029002 - Field Maintenance Expansion\Design\CADD\Sheet Files\K19029002_GI-SERIES.dwg

Attachment B: Updated Spec (26 0519)

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Single conductor building wire.

B. Metal-clad cable.

C. Wiring connectors.

D. Electrical tape.

E. Heat shrink tubing.

F. Oxide inhibiting compound.

G. Wire pulling lubricant.

H. Cable ties.

1.02 RELATED REQUIREMENTS

A. Section 07 8400 - Firestopping.

B. Section 26 0505 - Selective Demolition for Electrical: Disconnection, removal, and/or extension of existing electrical conductors and cables.

C. Section 26 0526 - Grounding and Bonding for Electrical Systems: Additional requirements for grounding conductors and grounding connectors.

D. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.

E. Section 28 4600 - Fire Detection and Alarm: Fire alarm system conductors and cables.

1.03 REFERENCE STANDARDS

A. ASTM B3 - Standard Specification for Soft or Annealed Copper Wire; 2013 (Reapproved 2024).

B. ASTM B8 - Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft; 2023.

C. ASTM B33 - Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes; 2010, with Editorial Revision (2020).

D. ASTM B787/B787M - Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation; 2004 (Reapproved 2020).

E. ASTM B800 - Standard Specification for 8000 Series Aluminum Alloy Wire for Electrical Purposes - Annealed and Intermediate Tempers; 2005 (Reapproved 2021).

F. ASTM B801 - Standard Specification for Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy for Subsequent Covering or Insulation; 2018 (Reapproved 2023).

G. ASTM D3005 - Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape; 2024.

H. ASTM D4388 - Standard Specification for Nonmetallic Semi-Conducting and Electrically Insulating Rubber Tapes; 2020.

I. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.

J. NECA 104 - Standard for Installing Aluminum Building Wire and Cable; 2012.

K. NECA 120 - Standard for Installing Armored Cable (AC) and Type Metal-Clad (MC) Cable; 2018.

L. NEMA WC 70 - Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy; 2021.

M. NETA ATS - Standard for Acceptance Testing Specifications for Electrical Power Equipment And Systems; 2025.

N. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

O. UL 44 - Thermoset-Insulated Wires and Cables; Current Edition, Including All Revisions.

P. UL 83 - Thermoplastic-Insulated Wires and Cables; Current Edition, Including All Revisions.

Q. UL 267 - Outline of Investigation for Wire-Pulling Compounds; Current Edition, Including All Revisions.

R. UL 486A-486B - Wire Connectors; Current Edition, Including All Revisions.

S. UL 486C - Splicing Wire Connectors; Current Edition, Including All Revisions.

T. UL 486D - Sealed Wire Connector Systems; Current Edition, Including All Revisions.

U. UL 510 - Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape; Current Edition, Including All Revisions.

V. UL 1569 - Metal-Clad Cables; Current Edition, Including All Revisions.

1.04 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

B. Maintain at the project site a copy of each referenced document that prescribes execution requirements.

C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

D. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

1.06 FIELD CONDITIONS

A. Do not install or otherwise handle thermoplastic-insulated conductors at temperatures lower than 14 degrees F, unless otherwise permitted by manufacturer's instructions. When installation below this temperature is unavoidable, notify Architect and obtain direction before proceeding with work.

1.07 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

A. Method Of Measurement:
   1. All work within 5’ of the building shall have no separate measurement and shall be included within the number of linear feet cost of Item 260519 – 1 New Underground Electrical.
   2. All work beyond 5’ of the building including cables and terminations serving the building shall be measured by the number of linear feet installed and connectors, and trench marking tape ready for operation, and accepted as satisfactory. Separate measurement shall be made for each cable installed in trench, duct bank or conduit. The measurement for this item shall not include additional quantities required for slack. Cable slack is considered incidental to this item and is included in the Contractor’s unit price.
   3. Provisions for the relocation of the Consumers Energy main service feed to the building.
      a. The unit of measurement for provisions to relocate the Consumers Energy line will be made at the contract unit price per linear foot. An allowance shall be provided for work needed to provide Consumers Energy with new service routing or for the cost incurred to cover the Consumers Energy fee to have them relocate the service in its entirety.

B. Basis of Payment

1. All work within 5’ of the building shall have no separate payment and shall be included within the number of linear feet cost of Item 260519 – 1 New Underground Electrical.
2. The accepted quantity of electrical conductors will be paid for at the Contract unit price per each, complete and in place, or modified. This price shall be full compensation for furnishing all materials and for all preparation, excavation, backfilling and placing of the materials, furnishing and installation of appurtenances and connections to duct banks and other structures as may be required to complete the item as shown on the plans and for all labor, equipment, tools and incidentals necessary to complete the structure.
   a. Payment will be made under:

Item 260519-1	New Underground Electrical	LF
Item 260519-2	*Consumers Energy Allowance*	*LS of $23,408*

PART 2 PRODUCTS

A. Metal-clad cable is permitted only as follows:
   1. Where not otherwise restricted, may be used:
      a. Where concealed above accessible ceilings for final connections from junction boxes to luminaires.
         1) Maximum Length: 6 feet.
      b. Where concealed in hollow stud walls, above accessible ceilings, and under raised floors for branch circuits up to 20 A.
         1) Exception: Provide single conductor building wire in raceway for circuit homerun from first outlet to panelboard.
   2. In addition to other applicable restrictions, may not be used:
      a. Unless approved by Owner.
      b. Where not approved for use by the authority having jurisdiction.
      c. Where exposed to damage.
      d. For damp, wet, or corrosive locations, unless provided with a PVC jacket listed as suitable for those locations.

2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

A. Provide products that comply with requirements of NFPA 70.

B. Provide products listed, classified, and labeled as suitable for the purpose intended.

C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.

D. Comply with NEMA WC 70.

E. Thermoplastic-Insulated Conductors and Cables: Listed and labeled as complying with UL 83.

F. Thermoset-Insulated Conductors and Cables: Listed and labeled as complying with UL 44.

G. Conductor Material:
   1. Provide copper conductors except where aluminum conductors are specifically indicated or permitted for substitution. Conductor sizes indicated are based on copper unless specifically indicated as aluminum. Conductors designated with the abbreviation "AL" indicate aluminum.
      a. Substitution of aluminum conductors for copper is permitted, when approved by Owner and authority having jurisdiction, only for the following:
         1) Services: Copper conductors size 1/0 AWG and larger.
         2) Feeders: Copper conductors size 1/0 AWG and larger.
      b. Where aluminum conductors are substituted for copper, comply with the following:
         1) Size aluminum conductors to provide, when compared to copper sizes indicated, equivalent or greater ampacity and equivalent or less voltage drop.

2) Increase size of raceways, boxes, wiring gutters, enclosures, etc. as required to accommodate aluminum conductors.

2. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M unless otherwise indicated.
3. Tinned Copper Conductors: Comply with ASTM B33.
4. Aluminum Conductors (only where specifically indicated or permitted for substitution): AA-8000 series aluminum alloy conductors recognized by ASTM B800 and compact stranded in accordance with ASTM B801 unless otherwise indicated.

H. Minimum Conductor Size:
1. Branch Circuits: 12 AWG.
a. Exceptions:
1) 20 A, 120 V circuits longer than 75 feet: 10 AWG, for voltage drop.
2) 20 A, 120 V circuits longer than 150 feet: 8 AWG, for voltage drop.
3) 20 A, 277 V circuits longer than 150 feet: 10 AWG, for voltage drop.

I. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

J. Conductor Color Coding:
1. Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.
2. Color Coding Method: Integrally colored insulation.
a. Conductors size 4 AWG and larger may have black insulation color coded using vinyl color coding electrical tape but it would be preferred to have wiring with solid insulation color thoughout the wiring.
3. Color Code:
a. 480Y/277 V, 3 Phase, 4 Wire System:
1) Phase A: Brown.
2) Phase B: Orange.
3) Phase C: Yellow.
4) Neutral/Grounded: Gray.
b. 208Y/120 V, 3 Phase, 4 Wire System:
1) Phase A: Black.
2) Phase B: Red.
3) Phase C: Blue.
4) Neutral/Grounded: White.
c. Equipment Ground, All Systems: Green.
d. Travelers for 3-Way and 4-Way Switching: Pink.
e. For modifications or additions to existing wiring systems, comply with existing color code when existing code complies with NFPA 70 and is approved by the authority having jurisdiction.

K. Manufacturers:
1. Copper Building Wire:
a. Cerro Wire LLC: www.cerrowire.com/#sle.
b. Encore Wire Corporation: www.encorewire.com/#sle.
c. General Cable Technologies Corporation: www.generalcable.com/#sle.
d. Service Wire Co: www.servicewire.com/#sle.
e. Southwire Company: www.southwire.com/#sle.
f. Substitutions: See Section 01 6000 - Product Requirements.
2. Aluminum Building Wire (only where specifically indicated or permitted for substitution):
a. Encore Wire Corporation: www.encorewire.com/#sle.

b. Southwire Company: www.southwire.com/#sle.
c. Stabiloy, a brand of General Cable Technologies Corporation: www.stabiloy.com/#sle.
d. Substitutions: See Section 01 6000 - Product Requirements.

L. Description: Single conductor insulated wire.

M. Conductor Stranding:
1. Feeders and Branch Circuits: Solid or stranded. .
2. Control Circuits: Stranded.

N. Insulation Voltage Rating: 600 V.

O. Insulation:
1. Copper Building Wire: Type THHN/THWN-2 or XHHW-2, except as indicated below.
a. Size 4 AWG and Larger: Type XHHW-2 or THHN/THWN-2.
b. Installed Underground: Type XHHW-2 or THHN/THWN-2.
2. Aluminum Building Wire (only where specifically indicated or permitted for substitution): Type XHHW-2.

2.03 METAL-CLAD CABLE

A. Manufacturers:
1. AFC Cable Systems Inc: www.afcweb.com/#sle.
2. Encore Wire Corporation: www.encorewire.com/#sle.
3. Service Wire Co: www.servicewire.com/#sle.
4. Southwire Company: www.southwire.com/#sle.
5. Substitutions: See Section 01 6000 - Product Requirements.

B. Description: NFPA 70, Type MC cable listed and labeled as complying with UL 1569, and listed for use in classified firestop systems to be used.

C. Insulation Voltage Rating: 600 V.

D. Insulation: Type THHN/THWN-2 or XHHW-2.

E. Provide dedicated neutral conductor for each phase conductor.

F. Grounding: Full-size integral equipment grounding conductor.
1. Provide additional isolated/insulated grounding conductor.

G. Armor: Steel, interlocked tape.

H. Provide PVC jacket applied over cable armor.

2.04 WIRING CONNECTORS

A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL 486C as applicable.

B. Wiring Connectors for Splices and Taps:
1. Copper Conductors Size 8 AWG and Smaller: Use twist-on insulated spring connectors.
2. Copper Conductors Size 6 AWG and Larger: Use mechanical connectors or compression connectors.
3. Connectors for Aluminum Conductors: Use compression connectors.

C. Wiring Connectors for Terminations:
1. Provide terminal lugs for connecting conductors to equipment furnished with terminations designed for terminal lugs.
2. Where over-sized conductors are larger than the equipment terminations can accommodate, provide connectors suitable for reducing to appropriate size, but not less than required for the rating of the overcurrent protective device.

3. Copper Conductors Size 8 AWG and Larger: Use mechanical connectors or compression connectors where connectors are required.
4. Stranded Conductors Size 10 AWG and Smaller: Use crimped terminals for connections to terminal screws.

D. Do not use insulation-piercing or insulation-displacement connectors designed for use with conductors without stripping insulation.

E. Twist-on Insulated Spring Connectors: Rated 600 V, 221 degrees F for standard applications and 302 degrees F for high temperature applications; pre-filled with sealant and listed as complying with UL 486D for damp and wet locations.

F. Push-in Wire Connectors: Rated 600 V, 221 degrees F.

G. Mechanical Connectors: Provide bolted type or set-screw type.

H. Compression Connectors: Provide circumferential type or hex type crimp configuration.

I. Crimped Terminals: Nylon-insulated, with insulation grip and terminal configuration suitable for connection to be made.

2.05 ACCESSORIES

A. Electrical Tape:
1. Vinyl Color Coding Electrical Tape: Integrally colored to match color code indicated; listed as complying with UL 510; minimum thickness of 7 mil; resistant to abrasion, corrosion, and sunlight; suitable for continuous temperature environment up to 221 degrees F.
2. Vinyl Insulating Electrical Tape: Complying with ASTM D3005 and listed as complying with UL 510; minimum thickness of 7 mil; resistant to abrasion, corrosion, and sunlight; conformable for application down to 0 degrees F and suitable for continuous temperature environment up to 221 degrees F.
3. Rubber Splicing Electrical Tape: Ethylene Propylene Rubber (EPR) tape, complying with ASTM D4388; minimum thickness of 30 mil; suitable for continuous temperature environment up to 194 degrees F and short-term 266 degrees F overload service.
4. Electrical Filler Tape: Rubber-based insulating moldable putty, minimum thickness of 125 mil; suitable for continuous temperature environment up to 176 degrees F.
5. Varnished Cambric Electrical Tape: Cotton cambric fabric tape, with or without adhesive, oil-primed and coated with high-grade insulating varnish; minimum thickness of 7 mil; suitable for continuous temperature environment up to 221 degrees F.
6. Moisture Sealing Electrical Tape: Insulating mastic compound laminated to flexible, all-weather vinyl backing; minimum thickness of 90 mil.

B. Heat Shrink Tubing: Heavy-wall, split-resistant, with factory-applied adhesive; rated 600 V; suitable for direct burial applications; listed as complying with UL 486D.

C. Oxide Inhibiting Compound: Listed; suitable for use with the conductors or cables to be installed.

D. Wire Pulling Lubricant:
1. Listed and labeled as complying with UL 267.
2. Suitable for use with conductors/cables and associated insulation/jackets to be installed.
3. Suitable for use at installation temperature.

E. Cable Ties: Material and tensile strength rating suitable for application.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that interior of building has been protected from weather.

B. Verify that work likely to damage wire and cable has been completed.

C. Verify that raceways, boxes, and equipment enclosures are installed and are properly sized to accommodate conductors and cables in accordance with NFPA 70.

D. Verify that field measurements are as indicated.

E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

A. Clean raceways thoroughly to remove foreign materials before installing conductors and cables.

3.03 INSTALLATION

A. Circuiting Requirements:
   1. Unless dimensioned, circuit routing indicated is diagrammatic.
   2. When circuit destination is indicated without specific routing, determine exact routing required.
   3. Arrange circuiting to minimize splices.
   4. Include circuit lengths required to install connected devices within 10 ft of location indicated.
   5. Maintain separation of Class 1, Class 2, and Class 3 remote-control, signaling, and power-limited circuits in accordance with NFPA 70.
   6. Maintain separation of wiring for emergency systems in accordance with NFPA 70.
   7. Circuiting Adjustments: Unless otherwise indicated, when branch circuits are indicated as separate, combining them together in a single raceway is permitted, under the following conditions:
      a. Provide no more than six current-carrying conductors in a single raceway. Dedicated neutral conductors are considered current-carrying conductors.
      b. Increase size of conductors as required to account for ampacity derating.
      c. Size raceways, boxes, etc. to accommodate conductors.

B. Install products in accordance with manufacturer's instructions.

C. Perform work in accordance with NECA 1 (general workmanship).

D. Install aluminum conductors in accordance with NECA 104.

E. Install metal-clad cable (Type MC) in accordance with NECA 120.

F. Installation in Raceway:
   1. Tape ends of conductors and cables to prevent infiltration of moisture and other contaminants.
   2. Pull all conductors and cables together into raceway at same time.
   3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
   4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.

G. Paralleled Conductors: Install conductors of the same length and terminate in the same manner.

H. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems.

I. Terminate cables using suitable fittings.
   1. Metal-Clad Cable (Type MC):
      a. Use listed fittings.
      b. Cut cable armor only using specialized tools to prevent damaging conductors or insulation. Do not use hacksaw or wire cutters to cut armor.

J. Install conductors with a minimum of 12 inches of slack at each outlet.

K. Where conductors are installed in enclosures for future termination by others, provide a minimum of 5 feet of slack.

L. Neatly train and bundle conductors inside boxes, wireways, panelboards and other equipment enclosures.

M. Group or otherwise identify neutral/grounded conductors with associated ungrounded conductors inside enclosures in accordance with NFPA 70.

N. Make wiring connections using specified wiring connectors.
   1. Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
   2. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors.
   3. Do not remove conductor strands to facilitate insertion into connector.
   4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector surfaces.
   5. Connections for Aluminum Conductors: Fill connectors with oxide inhibiting compound where not pre-filled by manufacturer.
   6. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
   7. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.

O. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength at least equivalent to unspliced conductors.
   1. Dry Locations: Use insulating covers specifically designed for the connectors, electrical tape, or heat shrink tubing.
      a. For taped connections, first apply adequate amount of rubber splicing electrical tape or electrical filler tape, followed by outer covering of vinyl insulating electrical tape.
      b. For taped connections likely to require re-entering, including motor leads, first apply varnished cambric electrical tape, followed by adequate amount of rubber splicing electrical tape, followed by outer covering of vinyl insulating electrical tape.
   2. Damp Locations: Use insulating covers specifically designed for the connectors, electrical tape, or heat shrink tubing.
      a. For connections with insulating covers, apply outer covering of moisture sealing electrical tape.
      b. For taped connections, follow same procedure as for dry locations but apply outer covering of moisture sealing electrical tape.
   3. Wet Locations: Use heat shrink tubing.

P. Insulate ends of spare conductors using vinyl insulating electrical tape.

Q. Field-Applied Color Coding: Where vinyl color coding electrical tape is used in lieu of integrally colored insulation as permitted in Part 2 under "Color Coding", apply half overlapping turns of tape at each termination and at each location conductors are accessible.

R. Identify conductors and cables in accordance with Section 26 0553.

S. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 8400.

T. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.

3.04 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements, for additional requirements.

B. Inspect and test in accordance with NETA ATS, except Section 4.

C. Perform inspections and tests listed in NETA ATS, Section 7.3.2. The insulation resistance test is required for all conductors. The resistance test for parallel conductors listed as optional is not required.

D. Correct deficiencies and replace damaged or defective conductors and cables.

END OF SECTION

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Attachment C: Updated Bid Sheet

GERALD R. FORD INTERNATIONAL AIRPORT

AIRFIELD MAINTENANCE BUILDING EXPANSION - PHASE 1

BIDDERS ARE REQUIRED TO COMPLETE ALL FIELDS SHADED.
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ITEM NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
		BASE BID (2026)				
1	C-102-5.1	INSTALLATION AND REMOVAL OF SILT FENCE	1710	LF		
2	C-102-5.2	INSTALLATION AND REMOVAL OF STABILIZED CONSTRUCTION	2	EA		
3	C-102-5.3	INSTALLATION AND REMOVAL OF STORM DRAIN INLET PROTECTION	11	EA		
4	C-102-5.4	INSTALLATION OF RIP RAP OUTLET PROTECTION	10	CY		
5	C-105-6.1	MOBILIZATION (10% MAX.)	1	LS		
6	C-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	1	LS		
7	P-101-5.1	PAVEMENT REMOVAL, HEAVY DUTY ASPHALT, VARIABLE DEPTH	360	SY		
8	P-101-5.2	PAVEMENT REMOVAL, LIGHT DUTY ASPHALT, VARIABLE DEPTH	2900	SY		
9	P-101-5.3	PAVEMENT REMOVAL, PCC, VARIABLE DEPTH	65	SY		
10	P-101-5.4	REMOVE SIDEWALK	75	SY		
11	P-101-5.5	REMOVE CURB AND GUTTER	580	LF		
12	P-101-5.6	REMOVE EXISTING PIPE, 36" DIAMETER OR LESS	285	LF		
13	P-101-5.7	REMOVE EXISTING DRAINAGE STRUCTURE	1	EA		
14	P-101-5.8	REMOVE EXISTING 8" DUCTILE IRON WATER MAIN	100	LF		
15	P-101-5.9	REMOVE EXISTING SANITARY PIPE	225	LF		
16	P-101-5.10	REMOVE EXISTING SANITARY STRUCTURE	3	EA		
17	P-101-5.11	REMOVE, STORE & REINSTALL EXISTING FRONTAGE SIGN	1	EA		
18	P-153-6.1	CONTROLLED LOW-STRENGTH MATERIAL (CLSM)	10	CY		
19	F-162-5.1	CHAIN-LINK FENCE	445	LF		
20	F-162-5.2	REMOVAL OF EXISTING FENCE	265	LF		
21	F-162-5.3	REMOVAL OF EXISTING SLIDING VEHICLE GATE	1	EA		
22	MDOT 202	TREE REMOVAL	9	EA		
23	MDOT 202	ROCK REMOVAL	12	EA		
24	MDOT 205	EMBANKMENT, CIP	1450	CY		
25	MDOT 205	UNCLASSIFIED EXCAVATION, STOCKPILE ON-SITE	3000	CY		

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ITEM NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
26	MDOT 205	UNCLASSIFIED EXCAVATION, DISPOSE OFF-SITE	2440	CY		
27	MDOT 205	SEPARATION GEOTEXTILE	750	SY		
28	MDOT 205	GRANULAR FILL COARSE AGGREGATE	250	CY		
29	MDOT 301	SUBBASE COURSE	2800	CY		
30	MDOT 302	AGGREGATE BASE	840	CY		
31	MDOT 401	FLARED END SECTION	2	EA		
32	MDOT 402	12 INCH - RCP CLASS III	296	LF		
33	MDOT 402	15 INCH - RCP CLASS III	16	LF		
34	MDOT 402	18 INCH - RCP CLASS III	328	LF		
35	MDOT 403	CATCH BASIN	7	EA		
36	MDOT 403	MANHOLE	1	EA		
37	MDOT 403	REPLACE CATCH BASIN FRAME AND GRATE	1	EA		
38	MDOT 404	6 INCH PERFORATED UNDERDRAIN PIPE	90	LF		
39	MDOT 501	HMA TOP COURSE 5EML	490	TON		
40	MDOT 501	HMA LEVELING COURSE 4EML	730	TON		
41	MDOT 501	HMA BASE COURSE 3EML	270	TON		
42	MDOT 802	CONCRETE CURB AND GUTTER	1500	LF		
43	MDOT 803	CONCRETE SIDEWALK	2380	SF		
44	MDOT 811	MARKINGS	780	SF		
45	MDOT 816	SEEDING AND MULCHING	1	LS		
46	MDOT 816	TOPSOIL OBTAINED ON-SITE	580	CY		
47	MDOT 823	4 INCH DI WATER MAIN	80	LF		
48	MDOT 823	6 INCH DI WATER MAIN	200	LF		
49	MDOT 823	8 INCH DI WATER MAIN	50	LF		
50	MDOT 823	4" GATE VALVE AND BOX	1	EA		
51	MDOT 823	6" GATE VALVE AND BOX	2	EA		
52	MDOT 823	HYDRANT, RELOCATE, CASE 2	1	EA		

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ITEM NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
53	MDOT 823	8" TAPPING SLEEVE AND 8" GATE VALVE AND BOX	1	EA		
54	MDOT 823	8" X 6" REDUCER	1	EA		
55	MDOT 823	8" X 4" TEE	1	EA		
56	MDOT 823	8" X 6" TEE	1	EA		
57	MDOT 825	6 INCH PVC SANITARY SEWER	265	LF		
58	MDOT 825	8 INCH PVC SANITARY SEWER	125	LF		
59	MDOT 825	SANITARY STRUCTURE	5	EA		
60	260505-1	DEMOLITION/SALVAGE EXISTING LIGHT POLE	5	EA		
61	260505-2	DISCONNECT EXISTING UGE	1	LS		
62	260505-3	AT&T DEMO VACATED LINE	1	LS		
63	260519-1	NEW UNDERGROUND ELECTRICAL (INCLUDING BONDING WORK AS IDENTIFIED IN 26 0526 & ALL WORK IDENTIFIED IN 26 0529 & CONDUIT AS NOTED IN 26 0533.13 & ALL WORK ASSOCIATED WITH SECTION 26 0553 & ALL WORK ASSOCIATED WITH SECTION 26 0583)	630	LF		
64	260519-2	UNDERGROUND WIRE FOR CONSUMERS ENERGY	1	LS		
65	260533.13-1	CONDUIT & TRENCHING FOR CONSUMER'S ENERGY	1	LS		
66	260533.16-1	BOXES FOR ELECTRICAL SYSTEMS	7	EA		
67	262726-1	RECEPTACLE - EXTERIOR	7	EA		
68	265600-1	SITE LIGHTING - SINGLE ARM W/ BASE	4	EA		
69	265600-2	SITE LIGHTING - DUAL ARM W/ BASE	3	EA		
70	282000-1	VIDEO SURVEILLANCE	1	LS		
71	282000-2	HOURLY RATE FOR NORMAL WORKING HOUR CALLBACK	75	HR		
72	282000-3	HOURLY RATE FOR NON-WORKING HOUR CALLBACK	75	HR		
					Total Contract Base Bid (2026)	

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ITEM NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
		ALTERNATE 1 (2027)				
1	C-102-5.1	INSTALLATION AND REMOVAL OF SILT FENCE	1710	LF		
2	C-102-5.2	INSTALLATION AND REMOVAL OF STABILIZED CONSTRUCTION	2	EA		
3	C-102-5.3	INSTALLATION AND REMOVAL OF STORM DRAIN INLET PROTECTION	11	EA		
4	C-102-5.4	INSTALLATION OF RIP RAP OUTLET PROTECTION	10	CY		
5	C-105-6.1	MOBILIZATION (10% MAX.)	1	LS		
6	C-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	1	LS		
7	P-101-5.1	PAVEMENT REMOVAL, HEAVY DUTY ASPHALT, VARIABLE DEPTH	360	SY		
8	P-101-5.2	PAVEMENT REMOVAL, LIGHT DUTY ASPHALT, VARIABLE DEPTH	2900	SY		
9	P-101-5.3	PAVEMENT REMOVAL, PCC, VARIABLE DEPTH	65	SY		
10	P-101-5.4	REMOVE SIDEWALK	75	SY		
11	P-101-5.5	REMOVE CURB AND GUTTER	580	LF		
12	P-101-5.6	REMOVE EXISTING PIPE, 36" DIAMETER OR LESS	285	LF		
13	P-101-5.7	REMOVE EXISTING DRAINAGE STRUCTURE	1	EA		
14	P-101-5.8	REMOVE EXISTING 8" DUCTILE IRON WATER MAIN	100	LF		
15	P-101-5.9	REMOVE EXISTING SANITARY PIPE	225	LF		
16	P-101-5.10	REMOVE EXISTING SANITARY STRUCTURE	3	EA		
17	P-101-5.11	REMOVE, STORE & REINSTALL EXISTING FRONTAGE SIGN	1	EA		
18	P-153-6.1	CONTROLLED LOW-STRENGTH MATERIAL (CLSM)	10	CY		
19	F-162-5.1	CHAIN-LINK FENCE	445	LF		
20	F-162-5.2	REMOVAL OF EXISTING FENCE	265	LF		
21	F-162-5.3	REMOVAL OF EXISTING SLIDING VEHICLE GATE	1	EA		
22	MDOT 202	TREE REMOVAL	9	EA		

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23	MDOT 202	ROCK REMOVAL	12	EA		
24	MDOT 205	EMBANKMENT, CIP	1450	CY		
25	MDOT 205	UNCLASSIFIED EXCAVATION, STOCKPILE ON-SITE	3000	CY		
26	MDOT 205	UNCLASSIFIED EXCAVATION, DISPOSE OFF-SITE	2440	CY		
27	MDOT 205	SEPARATION GEOTEXTILE	750	SY		
28	MDOT 205	GRANULAR FILL COARSE AGGREGATE	250	CY		
29	MDOT 301	SUBBASE COURSE	2800	CY		
30	MDOT 302	AGGREGATE BASE	840	CY		
31	MDOT 401	FLARED END SECTION	2	EA		
32	MDOT 402	12 INCH - RCP CLASS III	296	LF		
33	MDOT 402	15 INCH - RCP CLASS III	16	LF		
34	MDOT 402	18 INCH - RCP CLASS III	328	LF		
35	MDOT 403	CATCH BASIN	7	EA		
36	MDOT 403	MANHOLE	1	EA		
37	MDOT 403	REPLACE CATCH BASIN FRAME AND GRATE	1	EA		
38	MDOT 404	6 INCH PERFORATED UNDERDRAIN PIPE	90	LF		
39	MDOT 501	HMA TOP COURSE 5EML	490	TON		
40	MDOT 501	HMA LEVELING COURSE 4EML	730	TON		
41	MDOT 501	HMA BASE COURSE 3EML	270	TON		
42	MDOT 802	CONCRETE CURB AND GUTTER	1500	LF		
43	MDOT 803	CONCRETE SIDEWALK	2380	SF		
44	MDOT 811	MARKINGS	780	SF		
45	MDOT 816	SEEDING AND MULCHING	1	LS		
46	MDOT 816	TOPSOIL OBTAINED ON-SITE	580	CY		

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ITEM NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
47	MDOT 823	4 INCH DI WATER MAIN	80	LF		
48	MDOT 823	6 INCH DI WATER MAIN	200	LF		
49	MDOT 823	8 INCH DI WATER MAIN	50	LF		
50	MDOT 823	4" GATE VALVE AND BOX	1	EA		
51	MDOT 823	6" GATE VALVE AND BOX	2	EA		
52	MDOT 823	HYDRANT, RELOCATE, CASE 2	1	EA		
53	MDOT 823	8" TAPPING SLEEVE AND 8" GATE VALVE AND BOX	1	EA		
54	MDOT 823	8" X 6" REDUCER	1	EA		
55	MDOT 823	8" X 4" TEE	1	EA		
56	MDOT 823	8" X 6" TEE	1	EA		
57	MDOT 825	6 INCH PVC SANITARY SEWER	265	LF		
58	MDOT 825	8 INCH PVC SANITARY SEWER	125	LF		
59	MDOT 825	SANITARY STRUCTURE	5	EA		
60	260505-1	DEMOLITION/SALVAGE EXISTING LIGHT POLE	5	EA		
61	260505-2	DISCONNECT EXISTING UGE	1	LS		
62	260505-3	AT&T DEMO VACATED LINE	1	LS		
63	260519-1	NEW UNDERGROUND ELECTRICAL (INCLUDING BONDING WORK AS IDENTIFIED IN 26 0526 & ALL WORK IDENTIFIED IN 26 0529 & CONDUIT AS NOTED IN 26 0533.13 & ALL WORK ASSOCIATED WITH SECTION 26 0553 & ALL WORK ASSOCIATED WITH SECTION 26 0583)	630	LF		
64	260519-2	UNDERGROUND WIRE FOR CONSUMERS ENERGY	1	LS		
65	260533.13-1	CONDUIT & TRENCHING FOR CONSUMER'S ENERGY	1	LS		
66	260533.16-1	BOXES FOR ELECTRICAL SYSTEMS	7	EA		
67	262726-1	RECEPTACLE - EXTERIOR	7	EA		
68	265600-1	SITE LIGHTING - SINGLE ARM W/ BASE	4	EA		
69	265600-2	SITE LIGHTING - DUAL ARM W/ BASE	3	EA		

GERALD R. FORD INTERNATIONAL AIRPORT

AIRFIELD MAINTENANCE BUILDING EXPANSION - PHASE 1

BIDDERS ARE REQUIRED TO COMPLETE ALL FIELDS SHADED.
ALL OTHER FIELDS WILL BE AUTOMATICALLY CALCULATED.
AN EXCEL FILE WILL BE PROVIDED AND THESE SHEETS CAN BE FILLED OUT IN EXCEL OR HARD COPY.
ONLY HARD COPIES SHALL BE RETURNED WITH YOUR PROPOSAL.

ITEM NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
70	282000-1	VIDEO SURVEILLANCE	1	LS		
71	282000-2	HOURLY RATE FOR NORMAL WORKING HOUR CALLBACK	75	HR		
72	282000-3	HOURLY RATE FOR NON-WORKING HOUR CALLBACK	75	HR		
					Total Contract Alternate 1 (2027)	