

CITY OF ANN ARBOR
REQUEST FOR PROPOSAL



Information Technology Services Unit
Fiber Optic Network Construction Services

RFP No. 973

Proposal Due Date: Thursday, August 18, 2016
On or Before 2:00 P.M. (Local Time)

Information Technology Services

Issued By:
City of Ann Arbor
Procurement Unit
City Hall, 301 East Huron Street
Ann Arbor, Michigan 48107-8647

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SECTION I GENERAL INFORMATION

A. OBJECTIVE

The purpose of this Request for Proposal (RFP) is to select a Contractor to perform construction of an Outside Plant Fiber Optic Network in the City of Ann Arbor.

The City is replacing an existing leased aerial fiber optic network with a City owned fiber optic network (referred to hereafter as “A2-INET”).

The project has three (3) phases:

- Phase I: (In-Progress) – Fiber Route Planning, Network Design, Engineering and Permitting for a “make-ready” network;
- Phase II: (**the scope of this RFP**) Construction, Installation, Verification and Testing; and
- Phase III: OSP Maintenance.

Phase I of the project is currently in-progress and permitting for all aerial Network segments should be completed by early Fall 2016. Network segments requiring City right-of-way permitting, Washtenaw County Road Commission right-of-way permitting and Ann Arbor Railroad right-of-way permitting should be completed by mid-Summer 2016 allowing construction to begin Fall, 2016.

The required network infrastructure being sought by City of Ann Arbor has been divided into Network segments. The City of Ann Arbor is prepared to make fiber construction acquisitions from multiple providers in order to achieve the best functionality and price.

Separately, the City of Ann Arbor intends to negotiate contracts for the operations and maintenance of the fiber after construction is completed. The City of Ann Arbor will install and operate its own terminal, optical amplification, and regeneration equipment.

This RFP is for Construction Services only.

The City of Ann Arbor will prepare a separate RFP and solicit proposals for Phase III – Ongoing Maintenance.

Please indicate any other value-added arrangements, unique business features, sponsorship arrangements, special services, discounts or terms and conditions that might suggest solutions in order to meet the needs of the City of Ann Arbor.

The City of Ann Arbor intends to select a Contractor(s) in August or September of 2016 and to negotiate contract terms as soon thereafter as possible.

B. QUESTIONS ABOUT AND CLARIFICATIONS OF THE RFP

All questions regarding this RFP shall be submitted via email. Emailed questions and inquiries will be accepted from any and all prospective respondents in accordance with the terms and conditions of this RFP.

All questions shall be submitted on or before 3:00 P.M. (Local Time), Thursday, July, 28, 2016 and should be addressed as follows:

Scope of Work/Proposal Content questions emailed to IT-RFPs@a2gov.org

RFP Process and Compliance questions to Colin Spencer at cspencer@a2gov.org

Should any prospective Respondent be in doubt as to the true meaning of any portion of this Request for Proposal, or should the Respondent find any ambiguity, inconsistency, or omission therein, the Respondent shall make a written request for an official interpretation or correction. Such requests must be received via email by IT-RFPs@a2gov.org on or before Thursday, July, 28, 2016 by 3:00 P.M. (Local Time).

C. PRE-PROPOSAL MEETING

A pre-proposal meeting will be held for this project on Tuesday July, 26, 2016 at 3:00 P.M. at 2nd Floor City Council Chambers, Ann Arbor City Hall. Interested Contractors are strongly encouraged to attend the meeting.

D. ADDENDUM

All interpretation or correction, as well as any additional RFP provisions that the City may decide to include, will be made only as an official addendum that will be posted to a2gov.org and MITN.info and it shall be the Respondent's responsibility to ensure they have received all addenda before submitting a Proposal. Any addendum issued by the City shall become part of the RFP and will be incorporated in the Proposal.

To avoid any miscommunications, each Respondent must acknowledge in its proposal, all addenda which it has received, but the failure of a Respondent to receive or acknowledge receipt of any addenda shall not relieve the Respondent of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than official written addenda.

E. PROPOSAL FORMAT

To be considered, each Contractor must submit a response to this RFP using the format provided in Section III. No other distribution of proposals is to be made by the Respondent. The proposal must be signed in ink by an official authorized to bind the Respondent to its provisions. Each proposal must remain valid for at least ninety (90) days from the due date of this RFP.

Proposals should be prepared simply and economically providing a straightforward, concise description of the Respondent's ability to meet the requirements of the RFP. Each total submittal should not be more than 50 sheets (100 sides), not including required attachments. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed in ink by the person signing the proposal.

Each person signing the Proposal is required to certify that he/she is the person in the Respondent's firm/organization responsible for the decision as to the fees being offered in the Proposal and has not and will not participated in any action contrary to the terms of this provision.

F. SELECTION CRITERIA

Responses to this RFP will be evaluated using a point system as shown in Section III.

At the initial evaluation, the fee proposals will not be reviewed. After initial evaluation the City will determine top respondents, and open only those fee proposals. The City will then determine which, if any, firms will be interviewed. During the interviews, the selected firms will be given the opportunity to discuss their proposal, qualifications, past experience, and their fee proposal in more detail. If the City chooses to interview any respondents, the interviews will be held in September of 2016.

All Proposals submitted may be subject to clarifications and further negotiation. All agreements resulting from negotiations that differ from what is represented within the RFP or in the Respondent's response shall be documented and included as part of the final contract.

G. SEALED PROPOSAL SUBMISSION

All Proposals are due and must be delivered to the City Procurement Unit c/o Customer Service on, or before, **Thursday, August 18, 2016 by 2:00 p.m.** (local time). Proposals submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each Respondent **must submit in a sealed envelope one (1) original Proposal, five (5) additional Proposal copies, and two (2) copies of the Fee Proposal in a separate sealed envelope marked fee proposal contained within respondent's sealed proposal.** Proposals submitted must be clearly marked: **RFP No. 973 – Fiber Optic Network Construction Services** and then list Respondents name and address.

Proposals must be addressed and delivered to:

City of Ann Arbor
Procurement Unit
c/o Customer Service Desk,
First Floor, Guy C. Larcom Building
301 East Huron Street
P.O. Box 8647
Ann Arbor, MI 48107

All Proposals received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

Hand delivered Proposals will be date/time stamped by the City at the address above in order to be considered. Delivery hours are 9:00 a.m. to 3:00 p.m. Monday through Friday, excluding Holidays.

The City will not be liable to any Respondent for any unforeseen circumstances, delivery, or postal delays. Postmarking on the Due Date will not substitute for receipt of the Proposal. Each Respondent is responsible for submission of their Proposal. Additional time will not be granted to a single Respondent; however, additional time may be granted to all Respondents when the City determines that circumstances warrant it.

A proposal will be disqualified if:

- 1. The fee proposal is not contained within a separate sealed envelope.*
- 2. The fee proposal is submitted as part of the digital copy. Provide fee proposal in hard copy only.*
- 3. The forms provided as Attachment C - City of Ann Arbor Prevailing Wage Declaration of Compliance, Attachment D - City of Ann Arbor Living Wage Ordinance Declaration of Compliance, Attachment E - Contractor(s) Conflict of Interest Disclosure Form and Attachment F – City of Ann Arbor Non-Discrimination Declaration of Compliance of the RFP Document must be included in submitted proposals. Proposals that fail to provide these completed forms listed*

above upon proposal opening will be deemed non-responsive and will not be considered for award.

H. DISCLOSURES

Under the Freedom of Information Act (Public Act 442), the City is obligated to permit review of its files, if requested by others. All information in a Respondent's proposal is subject to disclosure under this provision. This act also provides for a complete disclosure of contracts and attachments thereto.

I. TYPE OF CONTRACT

A sample of the standard Sample Services Agreement is included as Attachment A. Those who wish to submit a proposal to the City are required to carefully review the Agreement. Respondents should specifically note that the insurance requirements under a City contract are listed in General Conditions. **The City will not entertain changes to terms and conditions of the standard Agreement.**

The City reserves the right to award the total proposal, to reject any and all proposals in whole or in part, and to waive any informality or technical defects if, in the City's sole judgment, the best interests of the City will be so served.

J. NONDISCRIMINATION AND LIVING WAGE REQUIREMENTS

The City's standard Agreement outlines the requirements for fair employment practices under City of Ann Arbor contracts. To establish compliance with this requirement, the respondent should complete and return with its proposal completed copies of the Non-Discrimination forms.

All respondents proposing to do business with the City of Ann Arbor, except those specifically exempted by regulations by the Administrator and approved by City Council, agree to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code and, if a "covered employer" as defined therein, to pay those employees providing services to the City under this agreement a "living wage" as defined in Chapter 23 of the Ann Arbor City Code; and, if requested by the City, provide documentation to verify compliance. Living Wage forms must be submitted with the proposal.

The following forms are attached:

- Living Wage Declaration form (Attachment D)
- Copy of the Current Living Wage poster (Attachment D)
- Non-Discrimination form (Attachment F)
- Non-Discrimination Ordinance poster (Attachment F)

K. CONFLICT OF INTEREST DISCLOSURE

The City of Ann Arbor Purchasing Policy requires that prospective Vendor(s) complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected Contractor(s) unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Contractor(s) Conflict of Interest Disclosure Form is found in Attachment E and must be submitted with the proposal.

L. COST LIABILITY

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the contractor prior to the execution of a Professional Services Agreement. The liability of the City is limited to the terms and conditions outlined in the Agreement. By submitting a Proposal, Respondent agrees to bear all costs incurred or related to the preparation, submission and selection process for the Proposal.

M. DEBARMENT

Submission of a proposal in response to this RFP is certification that the Respondent is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

N. AWARD PROTEST

All Proposal protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The respondent must clearly state the reasons for the protest. If a respondent contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the respondent to the Purchasing Agent. The Purchasing Agent will provide the respondent with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee whose decision shall be final.

O. SCHEDULE

The proposals submitted should define an appropriate schedule in accordance with the requirements of the Proposed Work Plan in Section III. The following is the solicitation schedule for this procurement:

Activity/Event	Anticipated Date
Pre-proposal Meeting	Tue., July 26, 2016 at 3:00 pm
Written Question Deadline	Thur., July 28, 2016 by 3:00 pm
Proposal Due Date	Thur., August 18, 2016 by 2:00 pm
Interview Contractors (if needed)	TBD
Contractor Selection/Negotiate Final Professional Services Agreement (PSA)	TBD
Expected City Council Authorization of PSA	TBD
PSA Execution, Award and Notice to Proceed	TBD

The above schedule is for information purposes only and is subject to change at the City's discretion. Proposals submitted shall further define an appropriate project schedule in accordance with the requirements of the proposed work plan. The final schedule will be negotiated based on the final scope of work and work plan agreed to by the City and the selected firm.

P. IRS FORM W-9

The selected Respondent will be required to provide the City of Ann Arbor an IRS form W-9.

Q. SURETY BONDS

Before the commencement of any work, the selected contractor will be required to provide to the City the following surety bond(s), issued by a surety company licensed to write surety bonds in the State of Michigan, executed on a form supplied by the City, and satisfactory to the City Attorney:

1. Performance Bond
2. Labor and Material Bond

R. INDEPENDENT FEE DETERMINATION

1. By submission of a proposal, the Respondent certifies, and in the case of joint proposal, each party thereto certifies as to its own organization, that in connection with this proposal:

- a) They have arrived at the fees in the proposal independently, without consultation, communication, or agreement, for the purpose of restricting competition as to any matter relating to such fees with any other proposal Respondent or with any competitor.
 - b) Unless otherwise required by law, the fees which have been quoted in the proposal have not been knowingly disclosed by the Respondent and will not knowingly be disclosed by the Respondent prior to award directly or indirectly to any other prospective Respondent or to any competitor.
 - c) No attempt has been made or shall be made by the proposal Respondent to induce any other person or firm to submit or not submit a proposal for the purpose of restricting competition.
 - d) Each person signing the proposal certifies that she or he is the person in the proposal Respondent's organization responsible within that organization for the decision as to the fees being offered in the proposal and has not participated (and will not participate) in any action contrary to 1.a), b), or c) above.
2. A proposal will not be considered for award if the sense of the statement required in the Fee Analysis portion of the proposal has been altered so as to delete or modify 1.a), or 1.c), If 1.b) has been modified or deleted, the proposal will not be considered for award unless the Respondent furnishes with the proposal a signed statement which sets forth in detail the circumstances of the disclosure and the Issuing Office determines that such disclosure was not made for the purpose of restricting competition.

S. RESERVATION OF RIGHTS

1. The City reserves the right in its sole and absolute discretion to accept or reject any or all Proposals or alternative Proposals, in whole or in part, with or without cause.
2. The City reserves the right to waive, or not waive, informalities or irregularities in bids or bidding procedures, and to accept or further negotiate cost, terms, or conditions of any bid determined by the City to be in the best interests of the City even though not the lowest bid.
3. The City reserves the right to request additional information from any or all Respondents.
4. The City reserves the right not to consider any Proposal which it determines to be unresponsive and deficient in any of the information requested within RFP.
5. The City reserves the right to determine whether the scope of the project will be entirely as described in the RFP, a portion of the scope, or a revised scope be implemented.

6. The City reserves the right to select one or more respondents to perform services.
7. The City reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the firm of the conditions contained in this Request for Proposals, unless clearly and specifically noted in the proposal submitted.
8. The City reserves the right to disqualify Proposals that fail to respond to any requirements outlined in the RFP, or failure to enclose copies of the required documents outlined within the RFP.

T. OFFICIAL DOCUMENTS

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the proposal documents obtained from any other source are not Official copies. Addenda and other proposal information will only be posted to these official distribution sites. If you obtained City of Ann Arbor proposal documents from other sources, it is recommended that you register on www.MITN.info and obtain an official copy. Respondents do not need to be shown on the plan holders list provided by MITN to be considered an official plan holder.

SECTION II BACKGROUND AND SCOPE OF WORK

BACKGROUND

The City is replacing an existing leased aerial fiber optic network with a City owned fiber optic network (referred to hereafter as “A2-INET”).

The project has three (3) phases:

- Phase I: (In-Progress) – Fiber Route Planning, Network Design, Engineering and Permitting for a “make-ready” network;
- Phase II: **(the scope of this RFP)** Construction, Installation, Verification and Testing; and
- Phase III: OSP Maintenance.

Phase I of the project is currently in-progress with network planning, network design and permitting being completed currently by a separate contractor. Site locations have been visited, aerial and underground network routes have been determined and verified, and bull/mule tape has been pulled in the Spring/Early Summer 2016 for a vast majority of underground Network segments.

Underground right-of-way permitting is underway and pending approval by local government and utilities. Network segments requiring City of Ann Arbor, MDOT, Washtenaw County Road Commission and Ann Arbor Railroad right-of-way permits should be approved in Fall-2016.

Right-of-Way permitting for all aerial Network segments (AT&T and DTE), is pending and should be completed in 2016.

The scope of this project phase (Phase II) entails construction, installation, termination and verification testing of approximately 45 miles of single-mode fiber optic network cable.

Approximately 22 miles of new aerial fiber will be required, along with 17 miles of newly installed underground cable in pre-existing conduit, and approximately 6 miles of newly bored conduit and fiber optic cable.

When completed, A2-INET will connect approximately 50 sites throughout the City of Ann Arbor.

The City of Ann Arbor is prepared to make fiber construction acquisitions from multiple providers in order to achieve the best functionality and price and may award multiple contracts.

The required fiber optic network being built by City of Ann Arbor has been divided into Network segments and are identified accordingly (i.e., Engineering Drawing/Print #). Detailed as-built

drawings in AutoCad format as well as Network segment maps, in Google Earth .kmz file format, will be provided to the winning Contractor(s) upon award of the contract(s).

Separately, The City of Ann Arbor intends to negotiate contract(s) for the operations and maintenance of the fiber after construction is completed.

The City of Ann Arbor will install and operate its own inside plant network equipment demarked up to and terminating at contractor(s) supplied patch panels for each site location.

The following scope of work is intended as an outline only. Offerors should provide sufficient details on how they intend to implement each item of work.

Following is a description of the tasks and activities included for this RFP. The Contractor(s) assigned to this project must demonstrate extensive experience with similar projects.

SCOPE OF WORK

A. Network Ring Construction

Constructing A2-INET by supplying, installing, terminating and testing single mode fiber optic network cable totaling approximately 45 miles, connecting approximately 50 sites located throughout the City of Ann Arbor to the network.

Approximately 22 miles of new aerial fiber, along with 17 miles of newly installed underground cable in pre-existing conduit and approximately 6 miles of newly bored conduit and fiber optic cable, will be required for completion of the network.

Engineering drawings have been prepared for each Network segment allowing for ease of permitting submittals and construction. Attachment I lists each Network segment and corresponding construction attribute requirements. The segments are listed in no particular order and each Network segment is identified by a unique Print # that corresponds to the AutoCad engineering drawing.

For example, the Network segment identified as Print #145-288 has the following construction requirements as listed in Attachment I:

- 3,933' aerial fiber optic cable;
- 261 overhead guy (OHG);
- 25 DTE pole attachments;
- 5 AT&T pole attachments;
- 21 anchors;
- 1 pole riser;
- 1,072' of new underground fiber optic cable (along with 3" conduit);
- 1 new hand-hole;
- 2 aerial storage loops; and

- 1 underground storage loop.

PLEASE NOTE: Most underground Network segments, using pre-existing City owned conduit, have already had bull/mule pull tape pre-installed. A few Network segments (identified in Attachment I) may exhibit sections where pull tape could not be installed due to a blockage. Attachment I provides the footage of the blockage and detailed engineering drawings identify beginning and ending extents for each blockage.

As an example: Attachment I, Network Segment for Print #148-282 has a no tape installed for 811' and also has 5' of short duct.

Cost of construction of new fiber along the Network segments must be specified. The cost for new construction must be accurate to within 15% and therefore not simply a rough estimate.

Contractor(s) must also take into account known conditions (as identified in Attachment I under the Issues Column - *No Tape Conduit and Short Duct*).

Detailed AutoCad drawings for each Network segment (Print #) and a detailed .kmz file, viewable with Google Earth, will be provided to the Contractor(s) upon award of the contract.

Bidders must also include a detailed project plan and timeline to complete their portion of the build. Project plan and timeline must be submitted in an MS Project 2010 or later version.

Bidders must describe their technical capabilities, relevant experience in constructing similar fiber systems, and provide a list of customers (including contact names and phone numbers) for whom they have done similar work.

Bidders must completely describe how they propose to provide the required segments. Bids must include maps & distances. All route engineering/as-built information and ad-hoc route changes must be submitted in a format that can be easily imported into ESRI GIS software.

For each Network segment being proposed, the bid must include per-foot unit pricing and must be submitted as specified in the Fee Proposal Form in Attachment I. Identify each price by the corresponding Print # for each Network route segment and for each Site location.

B. Network Site Locations

As stated earlier, there are approximately 50 sites requiring connection to A2-INET. Unless otherwise specified below, each site location will have 3-pair (6-strands of SMF) terminated at wall or rack mounted patch panels. The exact termination location is designated on engineering drawings that will be provided after the contract(s) is awarded.

For the City's 2 (two) data centers (Print #157-284 and Print #166-294), assume 180 strands of fiber will be terminated at each site location (60 strands for west network ring, 60 strands for east network ring, and 60 strands for network bi-sector).

Specific strand terminations and circuit provisioning details will be provided by the City of Ann Arbor upon award of the contract(s). Table 1 below, identifies each site location for A2-INET and the site's required construction attributes.

Table 1
Site Locations
(Refer to Attachment I for Expanded Table)

Location	Address	Print #	Entry Type	Interior Footage	Rack/Wall Mount PP	Comments
CITY HALL	301 E. Huron St.	157-284	Existing Duct		Rack	3 separate entries - all 3 entries enter from the West in existing duct
COUNTY ADMIN	220 N Main St	157-284	Existing Duct	10	Wall	Enter into MDF
U of M HEAD END	610 E University	160-282	Aerial	470	Rack	Interior thru tunnel from another building
SPARK CENTRAL	255 E Liberty St.	157-284	New UG	100	Rack	Below Grade Entry - R/R Asphalt at Building - Interior EMT
FARMERS MARKET	315 Detroit St.	157-286	New UG	100	Wall	R/R Bricks & 4 Sidewalk Flags - Interior EMT
AAATA HEADQUARTERS	2700 S Industrial	160-272	New UG	490	Rack	Tall Ceilings - Interior EMT
AAATA BLAKE TRANSIT	331 S Fourth Ave	157-284	Existing Duct		Rack	Existing Duct from Hand-hole to MDF
CENTRAL POLICE DEPT	324 Maynard St	157-284	New UG	10	Rack	Use existing pullbox if there is room
PARKING STRUCTURE	650 S. Forest Ave	160-282	Aerial	105	Wall	Interior EMT
AA PUBLIC LIBRARY - MAIN BRANCH	343 S Fifth Ave	157-284	New UG	65	Rack	Below Grade Entry/Use Existing 4" Entry - Interior EMT
AA PUBLIC LIBRARY - WEST BRANCH	2503 Jackson Rd	148-284	New UG	160	Wall	R/R Asphalt at Building - Interior EMT
AA PUBLIC LIBRARY - MALLET CREEK BRANCH	3090 Eisenhower Pkwy	166-270	Existing Duct		Rack	Existing 4" duct from riser pole to MDF with Maxcell
AA PUBLIC LIBRARY - TRAVERWOOD BRANCH	3333 Traverwood Dr	166-294	New UG	30	Rack	Enter into MDF
FULLER POOL	1519 Fuller Road	163-286	New UG	25	Wall	R/R 2 sidewalk flags - Enter into MDF
FIRE STATION #1	111 N. Fifth Ave	157-284	Existing UG	148	Rack	Existing Duct Entry - Interior EMT
FIRE STATION #2	1510 E Stadium Blvd.	163-276	New UG	10	Wall	Enter into MDF
FIRE STATION #3	2130 Jackson Rd	148-284	Aerial	10	Wall	Enter into MDF
FIRE STATION #4	2415 Huron Parkway	169-274	New UG	20	Wall	Enter into MDF - R/R Asphalt at Building

Location	Address	Print #	Entry Type	Interior Footage	Rack/Wall Mount PP	Comments
FIRE STATION #5	1946 Beal	166-292	Existing duct	10	Wall	Enter into MDF
FIRE STATION #6	1881 Briarwood Circle	157-270	New UG	35	Wall	Enter into MDF - Exterior EMT
VETS MEM. PARK	2150 Jackson Rd	148-284	New UG	220	Wall	Tall Ceilings - Interior EMT
HOUSING COMMISSION/ MAPLE - no building yet	NW Corner of Dexter/Maple	148-286	N/A	0	N/A	No Building - storage left in closest hand-hole
HOUSING COMMISSION/ MILLER	726 Miller Rd	154-286	New UG	32	Wall	Enter into MDF - R/R Sidewalk Flag
MACK POOL	715 Brooks St	154-286	New UG	100	Wall	R/R Asphalt at Building - Interior EMT
WATER TREATMENT PLANT	919 Sunset Rd	154-290	2 Entries - UG & Aerial	331/50	2 Rack	2 locations - Tall Ceilings - Interior EMT
SENIOR CENTER	1320 Baldwin Ave.	163-278	New Aerial	15	Wall	Enter into MDF
BUHR PARK	2751 Packard St.	166-272	New UG	10	Wall	Enter into MDF
WATER UTILITIES FIELD OPS	2000 S. Industrial	160-276	New UG	20	Wall	Enter into MDF
MUNICIPAL AIRPORT	801 Airport Dr.	157-264	New UG	10	Wall	Enter into MDF - Below Grade Entry - R/R Sidewalk Flag
FIELD OPERATIONS CENTER/SDC (2 Entries)	4251 Stone School Rd	166-294	Existing Duct both Entries	20	Rack	Existing Ducts into MDF
WASTEWATER TREATMENT	49 Dixboro Road	178-280	New UG	480	Rack	Interior EMT
GALLUP CANOE LIVERY	3000 Fuller Road	169-282	New UG	10	Wall	Enter into MDF
HURON HILLS GOLF COURSE CLUBHOUSE	3465 E Huron River Drive	172-280	Existing Duct	10	Wall	Enter into MDF
LESLIE GOLF COURSE CLUBHOUSE	2120 Traver Rd	163-292	Aerial	10	Wall	Enter into MDF
AA-SALINE PARK & RIDE	Ann Arbor-Saline Rd	154-272	New UG	0	N/A	Leave storage in new hand-hole
MILLER RD PARK & RIDE	Miller Rd & M-14	145-290	New UG	0	N/A	Leave storage in new hand-hole
PLYMOUTH RD PARK & RIDE	Plymouth Rd and US-23	172-294	New UG	0	N/A	Leave storage in new hand-hole
GREEN RD PARK & RIDE	Green Rd	172-292	New UG	0	N/A	Leave storage in new hand-hole
STATE ST PARK & RIDE #1	State St	160-272	New UG	0	N/A	Leave sp/storage in new hand-hole - 1 R/R Large Sidewalk

Location	Address	Print #	Entry Type	Interior Footage	Rack/Wall Mount PP	Comments
STATE ST PARK & RIDE #2	State St	160-272	New UG	0	N/A	Leave storage in new hand-hole
LIBERTY ST PUMP STATION	2675 W. Liberty St	148-282	New duct	50	Wall	Enter into MDF
CABINET AT STADIUM & HENRY		160-278	Existing Duct	N/A	N/A	Leave storage in existing hand-hole
CABINET AT NE CORNER OF EISENHOWER & STATE		160-270	New UG	N/A	N/A	Leave storage in new hand-hole
CABINET AT SE CORNER OF STATE & ELLSWORTH		160-266	New UG	N/A	N/A	Leave storage in existing hand-hole
MANCHESTER TANK	2111 Manchester Rd	166-276	New UG	50	Wall	Has existing hand-hole - Exterior EMT
NORTH CAMPUS TANK	3150 Plymouth Rd	169-292	New UG	50	Wall	Has existing hand-hole - Exterior EMT
NAP	3875 Huron River Dr	175-278	New UG	35	Wall	Enter into MDF
HVA	1200 State Circle	157-268	Existing Duct	50	Rack	Existing Duct into MDF

Construction Requirements

A. General Requirements

1. All work performed by the Contractor(s) shall be in accordance with the City's specifications and all applicable standards included but not limited to the following:

ANSI, ATIS, ASTM, BOCA, BICSI, EIA, IEEE, MI-OSHA, NEMA NESC, NFPA, OSHA, TIA, UL, and any other applicable industry standard(s).

The City's specifications can be found at:

<http://www.a2gov.org/departments/engineering/Pages/Engineering-and-Contractor-Resources.aspx>.

2. As part of their Proposal submittal, the Respondent shall provide an overall schedule of construction. Included in the schedule should be the anticipated start time based on the City's Notice to Proceed. Any seasonal limitations on work should be noted.
3. The Respondent is to include all mobilization costs in their cost for each Task. At no time shall the Contractor be paid for mobilization even if the work will be separated into multiple phases with possibly multiple mobilization efforts.

4. All Traffic Control needed to perform any and all portions of the work is the responsibility of the Contractor and shall be included in the cost for each Task, regardless of the number of traffic control mobilizations and setups required.
5. Any damage to and not limited to: landscaping, private property, University of Michigan property, roads, curb and gutter, sidewalk, or existing utilities shall be repaired by the Contractor and/or any their sub-contractor(s) immediately at no cost to the project.
6. The Contractor(s) shall confine work to ROW property at all times. At no time, shall the Contractor(s) enter private property, University of Michigan property, or perform any work unauthorized by the City of Ann Arbor.
7. Contractor(s) is responsible for locating all existing underground services including: electric, gas, telephone, data, water, and sewer prior to beginning any underground work. Coordination with Miss Dig is required.
8. Contractor(s) will provide experienced installers who are licensed or certified to install fiber manufactures material (i.e., CommScope, Corning, or Draka).
9. Contractor(s) is required to facilitate inspections of work with City of Ann Arbor and the City's designated representative (design, engineering services contractor) that is providing construction oversight under a separate contract. Any deficiencies revealed during inspections by City and/or designated representatives of the City of Ann Arbor, are the sole responsibility of the contractor(s) to resolve.
10. When construction is completed, the contractor(s) shall perform continuity testing of optical fibers using OTDR and industry standards for testing. Refer to Sections on Cable Splicing and Fiber Acceptance and Testing for requirements.
11. Contractor(s) shall install necessary lighting protection in accordance with aforementioned standards.
12. Bonding on aerial Network segments is required per AT&T and DTE pole attachment agreements. Contractor(s) must be familiar with AT&T and DTE pole attachment requirements.
13. Copies of the AT&T and DTE pole attachment agreements will be provided to the winning Contractor(s) upon award of the contract(s).
14. Grounding for underground Network segments is required at every splice enclosure with a minimum of 8 (eight) feet of grounding rod. Grounding rods must be meet applicable industry standard specifications.
15. Contractor(s) must ensure adequate clearance exists between proposed fiber build and other utilities, ground, rail, roads, and water. At a minimum the Contractor(s) is required to build conforming to NESC codes.

16. The Contractor(s) is also responsible to verify local utilities do not have more stringent clearance codes.
17. Contractor(s) are responsible for adhering to all right-of-way and utility permitting terms and conditions as set forth in each right-of-way permit.
18. Any construction changes must be pre-approved by the City of Ann Arbor and the City of Ann Arbor's oversight contractor before commencing with said change. Redline edit drawings in AutoCad format will be required for documenting any approved changes.
19. If deficiencies and/or non-compliance issues are discovered by the City of Ann Arbor and the City or Ann Arbor's construction oversight contractor, contractor(s) is responsible for remediation.
20. Contractor(s) is responsible for all jobsite cleanup and the remove of all spent fiber reels and other materials used during construction.

B. Performance and Labor and Materials Bonds

Bonds will be required from the successful contractor(s). Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company authorized to transact business in Michigan and satisfactory to the City Attorney (see ATTACHMENT A).

C. Warranty and Workmanship

Provide warranty, workmanship and labor details.

D. Construction Restoration

Contractor(s) is responsible for the restoration of landscape to its original condition after work is complete. Surrounding area must be filled, leveled and compacted. If grass restoration is required, contractor must apply seed or hydro seed.

E. Utility Engineering Fees and Permits

Utility fees will be paid directly by The City of Ann Arbor. Contractors are responsible to coordinate efforts with the utilities involved.

F. Make Ready Fees

Make ready fees will be paid directly by City of Ann Arbor. Contractors are responsible to coordinate efforts with utilities involved.

G. Cable Pulling

Install continuous 144-conductor fiber optic cables for A2-INET, as specified in Attachment I and Table 1. The installation will be newly installed aerial fiber optic cables connected to utility poles, run through pre-existing City-owned conduit, and/or run through newly installed 3-inch

conduit.

Install 48-conductor fiber optic cables from the primary ring of A2-INET via splices and terminate to each site location as specified in Attachment I and Table 1.

Install the cable such that the optical and mechanical characteristics of the fiber are not degraded.

Contractor(s) must comply with the manufacturer's recommended installation temperature, pulling tension and bend radius.

Do not violate the minimum bend radius or the maximum tension, both during and after installation. Corner rollers (wheels), if used, must not have radii less than the minimum installation bending radius of the cable. A series array of smaller wheels can be used for accomplishing the bend if the cable manufacturer specifically approves the array.

Use a clutch device to ensure the allowable pulling tension is not exceeded, if the cable is pulled by mechanical means. Also, attach a strain gauge to the pulling line at the cable exit location, and at a sufficient distance from the take-up device such that the strain gauge can be read throughout the entire cable pulling operation.

Cables should be fed directly in by hand or over large diameter bends to prevent kinks, small bends, sharp edges and crossovers. Cable should also be fed out of each pull box in a fashion that minimizes bends. Sufficient slack should be left so that each cable may be trained to its final location free of stress and completely clear of hand-hole openings.

The pulling tension should be continuously monitored to assure that the maximum recommended load is not exceeded. If the expected loads are close to maximum, additional pull boxes should be considered and/or the use of lubricants compatible with the outer jacket material of the cable.

Use entry guide chutes to guide the cable into the pull-box conduit ports.

Only lubricants approved by the cable manufacturer are permitted. Wipe the exposed cable in a pull box, junction box, or cabinet clean of cable lubricant with a cloth, after the cable has been installed.

Seal the fiber optic cable ends to prevent the entry of water.

H. Cable Lubricants

Several lubricants are available for lowering friction forces. These include greases, waxes, clay slurries and water-based gels. Fiber optic jacket materials are compatible with most of these. For new conduit, lubrication of the conduit before pulling is required—particularly if there are several bends.

I. Cable Splicing

All splices must be fusions splices. Splices shall conform to ANSI/TIA/EIA standards. Splice locations have been incorporated into the network design and provisions for storing resulting slack cable after splicing is complete.

The construction methods shall be in accordance with fiber optic installation procedures. The Contractor(s) performing any task requiring the opening of the fiber optic cable jacket, installation of fiber optic connectors, fusion splicing, or the testing of any fiber optic cable, drop cable, or patch cords will utilize Fiber Optic Technicians that have been pre-approved by the City of Ann Arbor.

All fusion splices will have with a maximum loss of < 0.25 dB unidirectional loss using 1550 nm optical source, a maximum bi-directional average loss of < 0.15 dB using 1550 nm optical source.

Similarly, a maximum loss of < 0.3 dB unidirectional loss using 1310 nm optical source, and a maximum bi-directional average loss of < 0.20 dB loss using a 1310 nm optical source, shall be achieved. Testing must use industry standard TIA-472D000-B and Measurement Method FOTP-78. Refer to **Acceptance and Testing**, for specific requirements on testing.

Fusion splicing equipment will be provided by the Contractor(s) and be cleaned, calibrated and specifically adjusted to the fiber and environmental conditions at the start of each shift.

Splice Protection. Each spliced fiber will be packaged in a heat shrinkable splice protection sleeve with strength member. The protection sleeve will cover the splice any bare fiber stripped of its coating. The use of RTV or silicone is strictly prohibited.

J. Labeling and Identification

Identification labels will be supplied by the Contractor(s) and will be installed by the Contractor(s) on the fiber in each hand-hole and at every point of attachment on the utility poles per specifications from Utility companies, per utility pole attachment agreements, and the City of Ann Arbor requirements listed below.

1. **Aerial Cables.** Contractor(s) is responsible for supplying and installing aerial cable markers per Utility company specifications and/or pole attachment agreements.
2. **Underground Cables and Splice Cables.** Contractor(s) is responsible for supplying and installing underground cable markers to identify cable ID or Code, cable type, strand count and distance in feet. William Frick and Company (or equivalent) has thick, high-vis orange plastic markers that are ideal for aboveground and underground cable marking. A laminated flap protects handwritten information.

K. Aerial Construction Requirements

1. **Grounding.** Contractor is responsible to ensure proper grounding, bonding, and that lightning protection is installed according to standards.

2. **Aerial Cable.** All cable must be supported by support a strand (i.e., messenger cable) per industry standards.
3. **Aerial Cable Slack Requirements.** 150 foot maintenance loops are required every 1,500 feet, as specified in engineering drawings. Maintenance loops must be dressed and stored properly. All slack shall be physically protected.
4. Provide aerial service loops with snowshoes in various locations (as specified on engineering drawings) to provide sufficient slack in the event that a repair becomes necessary.

The longest aerial span will determine these service loop lengths per engineering drawings. Wrapping will be done as directed in the field.

5. **Aerial Cable Lashing.** All cable lashing will be double-lashed with 0.038 inches, Type 302 austenitic, non-magnetic and thermally non-hardening stainless steel with a break strength of at least 115 pounds or 0.045 inch, Type 430 Magnetic, thermally non-hardening ferritic stainless steel with a break strength of at least 125 pounds.

L. Underground Construction Requirements

1. All fiber buried with directional boring must be a minimum of 4 (four) feet below grade.
2. Newly installed conduits will be clear of all dirt, foreign matter, water and debris before installing cable.
3. **Conduit.** For Network segments requiring new conduit installation that conduit must be 3 (three) inch diameter Dura-Line Smooth-wall HDPE Conduit or an equivalent. Provide as an option, conduit with Silicore-TM permanently lubricated lining so greater pulling and jetting distances can be achieved where necessary.
4. **Above Ground Markers.** Above ground markers must be installed ~500 feet or a lesser line-of-site along burial path, depending on Network segment geography.
5. **Cable Slack Requirements.** Throughout the underground cable plant, pull and store excess cable slack at designated intervals per Attachment I and Table 1 and the engineering drawings.
6. Contractor(s) must provide stone base adequate drainage in hand-hole.

M. Above-Ground Cabinets Construction

There are 3 (three) locations requiring new installation of above-ground cabinets. These are identified in Table 1 as Print #160-278, 160-270 and 160-266. Install Corning Cross-Connect Cabinets according to manufactures specifications and the City of Ann Arbor's specifications. The City's specifications can be found at:

<http://www.a2gov.org/departments/engineering/Pages/Engineering-and-Contractor-Resources.aspx>.

N. Material Specifications

ALL materials required to complete construction will be supplied and installed by the Contractor(s). The materials required for each Network segment and Site Locations connected to A2-INET, are provided in Attachment I.

The only exception are Network segments that will use pre-existing City owned underground conduit, pre-existing hand-holes and/or pre-existing traffic control cabinet enclosures, as specified in Network segment drawings.

Network segments running through pre-existing conduit are identified in Attachment I. Detailed engineering drawings will also be provided upon award of the construction contract(s).

1. **Fiber Optic Cable.** All fiber optic cables must be indoor/outdoor, plenum-rated cables for inter-building and intra-building backbones in aerial, duct and riser applications. Deliver the cable on reels without splices. Ensure both ends of the cable are sealed to prevent moisture ingress.
 - a. Install 144F Single Mode Fiber Cable - Provide CommScope® Outside Plant Single Jacket/Single Armor, Gel-Free, Dry-Lock, Outdoor Stranded Loose Tube Cable (Part # D-144-LA-8W-F12NS), or an approved equivalent.
 - b. Install 48F Single Mode Fiber Cable - Provide CommScope® Outside Plant Single Jacket/Single Armor, Gel-Free, Dry-Lock, Outdoor Stranded Loose Tube Cable (Part # D-048-LA-8W-F12NS), or an approved equivalent.

These cables have corrugated steel tape armor that is strong yet flexible, providing additional crush and rodent protection.

2. **Cable Connectors.** LC connectors are required, providing a small form ceramic ferrule with 1.25 mm ferrule that are easily terminated with any adhesive.
3. **Cable Risers.** Supply and Install FREEDOM tight-buffered cable, risers, 48F and 144F, single-mode (OS2), by Corning Optical Communications, or an approved equal.
4. **Splice Closures.** Supply and install Corning Optics Splice Closure Fiber (SCF) or equivalent, preloaded splice trays that are aerial and underground rated allowing up to 288 single fiber splices. The closure must provide ports for uncut feeder cables and ports for drop cables. The closure, in canister configuration, with a quick-seal mechanical seal port, must allow for rapid and easy addition of cables after initial installation is complete.
5. **Conduit.** Supply and install 3 (three) inch Dura-Line Smoothwall HDPE Conduit or an equivalent is required for each Network segment needing newly installed underground

conduit. Dura-Line is made to Industry standards for power and communications applications.

It can be installed using open trench methods, HDD (Horizontal Directional Drilled) plowed, or pulled into conduit. Price Smoothwall HDPE conduit with optional Silicore-TM permanently lubricated lining, Smoothwall, so ducts can be maximized for greater pulling and jetting distances, reducing the coefficient of friction over standard HDPE conduit.

6. **Hand-Holes.** Supply and install Quazite Hand-holes at locations as specified in Attachment I and Table 1. All hand-holes at splice locations and underground slack loop locations are 30"x48" double deep or as specified in Attachment I. All remaining hand-holes sizes are specified as 17" x 30".
7. **Above-Ground Cabinets.** Supply and install Corning Cross-Connect Cabinets according to manufactures and City of Ann Arbor's specifications identified in Table 1 on **Print #160-278, #160-270 and #160-266.** Table 2 below provides the required specifications for the above-ground cabinets.

**Table 2
Above-Ground Cabinets**

Corning Cable Systems Optical Cross-Connects (OCC) Cabinet Specifications		
Item	Description	Quantity
OCC-080-G	Pad-mountable version	3
PAD-OCC-CSS-02	Pad-mountable frame w/ cable storage area, 18 in. buried includes 6 inch buried pad mountable frame	3
OCC-PORT-KIT	Bottom Entry Panel w/ 6 watertight cable ports	6 (2 for each cabinet)

8. **Closet Connector Housing (CCH) and Patch Panels.** Several locations will require connector housings and patch panels. Supply and install Closet connector housings (CCHs) per Attachment I. CCH's provide interconnect or cross-connect capabilities between outside plant, riser or distribution cables and opto-electronics.

From fiber and cable routing and strain relief, to port labeling and termination, these housings reduce the risk of error that can disrupt networks. Table 3 below provides the required specifications for CCHs and panels.

Table 3

Closet Connector Housing (CCH) and Patch Panels

Closet Connector Housing (CCH) and Patch Panels Specifications			
Item	Supplier	Description	Quantity
CCH-04U	Corning Optical	CLOSET CONN HSG 4U F/12 PNL	6
WCH-02P	Corning Optical	Wall-MNTD CLST HOUS/2CCH PNL	12
CCH-01U	Corning Optical	CLOSET CONN HSG 1U F/2 PNL	23
CCH-CP24-A9	Corning Optical	CCH PNL W/12 LC DUPLEX SM	36
CCH-CP12-A9	Corning Optical	CCH PNL W/6 LC DUPLEX SM	35
OR-PHD5E6U48	Ortronics	48 Port 110/6 Port C5E HDCLARITY	7

- 9. Secure Rack Enclosure Cabinets.** Seven (7) locations will require installation of secure, low profile, rack enclosure cabinets. Supply and install Tripp Lite 4U vertical, wall mount low profile secure rack enclosure cabinets per Attachment I. Table 4 below provides the required specifications for secure rack enclosure cabinets.

Table 4

Secure Rack Enclosure Specifications

Secure Rack Enclosure Specifications			
Item	Supplier	Description	Quantity
SRWF4U	Tripp Lite	TRIPP LITE 4U WALL MOUNT	7

- 10. Other Equipment and Materials Not Specified.** Supply and install any other equipment and materials that are not specified in this RFP but are required for completion of A2-INET per Attachment I and Table 1, shall meet and/or exceed all applicable City of Ann Arbor specifications, Utility specifications (e.g., AT&T, DTE), and industry standards for fiber optic network inside plant and outside plant construction (e.g., overhead guys, sidewalk anchor, etc.)

Acceptance and Testing

A. Network Construction and Site Location Connectivity

The Contractor(s) is required to construct A2-INET per detailed engineering drawings that will be provided by the City of Ann Arbor upon award of the contract.

All construction activities must meet the construction, material and industry specifications and requirements within this RFP. Deficiencies shall be remediated by the Contractor(s) at no cost to the City of Ann Arbor.

Network segments that must deviate from the original design, due to unplanned and/or unforeseen site conditions must be approved by the City of Ann Arbor and the contractor retained by the City of Ann Arbor to providing construction oversight.

Deviations to splicing and/or site location terminations must be pre-approved and then appropriately documented with red-line drawings and supporting documentation (refer to Section IV Documentation).

B. Fiber Testing

The Contractor(s) is required to test the fiber after installation, including all splicing and termination, after completion. Test the fiber from end to end through any interconnections to ensure that the path is properly installed and that polarization and routing are correct and documented. Any out of specification deficiencies identified must be properly corrected per industry standards.

For each network segment or fiber optic link, including spare fibers, determine whether the optical loss is within the limits permissible under applicable testing industry standards.

A link is defined as a continuous segment of fiber between one connector and another connector.

When testing links that do not have connectors on both ends, use a mechanical splice to attach a pigtail to the unterminated fiber for the duration of the test. Mechanical splices will not be measured for separate payment.

The following industry testing standards shall be used to verify proper construction and installation:

1. Testing industry standard FOTP-78 (Fiber Optic Test Procedure) will be applied to all fiber splicing and unused fibers within the following parameters using the bidirectional method established by FOTP-78, as follows:
 - a. All fusion splices will have less than 0.15 dB loss using 1550 nm optical source. The test will be bi-directional with no splice loss being greater than 0.15 DB. Since the test is bi-directional, the splice loss refers to the final loss value

obtained once the test results are averaged at each splice; none being greater than 0.15 dB.

- b. Terminations will have loss less than 0.4 dB using 1550 nm and 1310 nm optical source. Testing methods will apply industry standard TIA-472D000-B Section 8.2.1 (Telecommunications Industry Association) using Optical Time Domain Reflectometer (OTDR) as the measurement device.
 - c. No manual calculations of bi-directional averages are allowed.
 - d. Record all splice losses and termination losses in a Microsoft Excel spreadsheet and submit to the City of Ann Arbor for approval.
2. Perform OTDR testing which captures optical attenuation on all fibers after post-installation. Optical attenuation performance shall meet or exceed standard TIA-472D000-B Section 8.1 for single-mode fiber. The maximum optical attenuation loss cannot exceed 0.25 dB/km at 1550 and 0.35 dB/km 1310 nm testing.

C. Splice Testing Documentation

Documentation of the fiber optic cable plant (test results) should follow ANSI/TIA/EIA-606 Administrative Standard for Telecommunications infrastructure of commercial Buildings. This documentation shall include the insertion loss data.

Documentation

A. Document the Installation

Good record keeping is essential to successful completion of the project. This will help to ensure that A2-INET is installed correctly and that future trouble shooting and upgrading will be simplified. All CommScope® fiber optic cables have a unique lot number shown on the shipping spool. It is important that this number be recorded. Cable pre- and post- installation test data should be recorded in an orderly and logical fashion.

Prepare diagrams showing all the links tested in this project. On each line representing a link, show the maximum allowable loss and the actual loss Ensure the actual loss is the one measured after all corrective actions have been taken.

Provide an OTDR trace for all fibers to document the location of the sources of optical loss in the cable (refer Acceptance and Testing).

All Red-line drawings, field notes, documentation, submitted to City of Ann Arbor in a format acceptable to the City of Ann Arbor (e.g., AutoCad, ESRI GIS, etc.).

Schematics and detailed circuit diagrams of all splice locations shall be provided in an acceptable format to the City of Ann Arbor.

All fiber testing documentation must be provided in Microsoft Excel and Microsoft Word.

Measurement and Payment^{1, 2, 3,4}

The completed work, as described, will be measured and paid for at the contract unit price using the following pay items as specified in **Attachment H Fee Proposal Form**. An abbreviated Sample Fee Proposal Form is provided in the Table 5 below.

Table 5

Sample Fee Proposal Form^{1, 2, 3, 4}

Network Segment Construction/Site Location Connection per Attachment I, Table 1.	Print #:		
	SINGLE BASE BID		
	Per ft Amount	Est. Footage¹	Subtotal (\$)
Fiber Construction per foot for new aerial construction	\$		
Fiber Construction per foot for overlash	\$		
Fiber Construction per foot to pull through existing conduit	\$		
Fiber Construction per foot for new underground installation (Boring) including conduit	\$		
Fiber Construction per foot for new underground installation (Plowing if required) including conduit	\$		
Subtotal			\$
	Per Splice	Total # Splices	Subtotal
Fiber OSP Construction price per splice for 48 count loose tube	\$		
Fiber OSP Construction price per splice for 144 count loose tube	\$		
All Other Material Costs (see Table 1 and Attachment I)			\$
Labor Costs			\$
Subcontractors			\$
Other Costs (specify)			\$
Total Cost Estimate			\$

Sample Proposal Form^{1, 2, 3, 4}

¹ Use estimated footage for each Network Segment and/or Site Location provided in Table 1 and Attachment I.

² **Fiber Optic, Cable, Single Mode Fiber, 144F** includes furnishing and installing outdoor-rated 144-conductor fiber optic cable. **Fiber Optic, Cable, Single Mode Fiber, 48F** includes furnishing and installing outdoor-rated 48-conductor fiber optic cable.

³ **Fusion Splices.** Fusion Splice will be measured in units of each and will be paid for at the contract unit price for each.

⁴ **Material Costs.** Include all material costs per Attachment I and/or Table 1 specifications for each Network Segment and/or Site Location. This price shall include the furnishing of all materials and installation.

SECTION III
MINIMUM INFORMATION REQUIRED

Respondents should organize their Proposals into the following Sections:

- A. Professional Qualifications
- B. Past Involvement with Similar Projects
- C. Proposed Work Plan
- D. Fee Proposal by Task (include in a separate sealed envelope clearly marked “Fee Proposal”)
- E. Authorized Negotiator
- F. Attachments

The following describes the elements that should be included in each of the proposal sections and the weighted point system that will be used for evaluation of the proposals.

A. Professional Qualifications and Past involvement with Similar Projects – 30 points

1. State the full name and address of your organization and, if applicable, the branch office, and **Major** sub-contractors that will perform, or assist in performing, the work hereunder.
2. Provide a list of specific experience and indicate proven ability in implementing similar projects for the firm to be involved in the project. At a minimum, Prime Contractor, the firm manufacturing the liner and the firm installing the liner should each provide a minimum of three projects of similar size and type completed in the past 5 years. A complete list of client references must be provided for similar projects recently completed. It shall include the firm/agency name, address, telephone number, project title, and contact person. A form has been provided in Attachment H – Past involvement with Similar Projects. In addition to the information requested on the form, provide detailed explanations of the previous projects as part of the written proposal and any additional information that would be helpful for the City to determine the most appropriate Respondent to be used.
3. Provide any additional information on your qualifications or those of the **Major** sub-contractors that would be helpful for the City to determine the most appropriate Respondent to be used.

B. Proposed Work Plan – 50 points

Provide a detailed and comprehensive description of how the Respondent intends to complete the services requested in this RFP. This discussion shall include, but not be limited to items requested in Section II including an overall construction schedule.

Respondents will be evaluated on the clarity, thoroughness, and content of their responses to the above items.

C. Fee Proposal - 20 points

Fee schedules shall be submitted in a separate, sealed, envelope as part of the proposal using the attached form (Attachment I). Fee quotations are to include lump sum fees for each of the three tasks described in this RFP. The fee proposed must include the total estimated cost for the project when it is 100% complete and must include costs for mobilization, permits, flow control, and traffic control in the cost for each Task.

A sample of the required Services Agreement is included Attachment A.

D. Authorized Negotiator

Include the name, phone number, and e-mail address of persons(s) in your organization authorized to negotiate the Professional Services Agreement with the City.

E. Attachments

The following forms must be completed and returned with the proposal. These elements should be included as attachments to the proposal submission:

- Living Wage Forms (Attachment D)
- Non-Discrimination Disclosure (Attachment F)
- Contractor(s) Conflict of Interest Disclosure Form (Attachment E)
- Fee Proposal Form (Attachment H) - **Submitted in a separate sealed envelope marked fee proposal**

PROPOSAL EVALUATION

A selection committee composed of City staff will evaluate each proposal by the above described criteria and point system (A and B, based on 80 points) to select a short list of firms for further consideration. The City reserves the right to not consider any proposal which it determines to be unresponsive and deficient in any of the information requested for evaluation. A proposal with all the requested information does not guarantee the proposing firm to be a candidate for further consideration. The City may contact references to verify material submitted by the Respondents.

Interviews with the selected firms will be scheduled if deemed necessary by the City. At the interviews, the selected firms will be given the opportunity to discuss in more detail their qualifications, past experience, proposed work plan, and fee proposal. The interview must include the project team members expected to complete a majority of work on the project. The interview shall consist of a presentation of up to thirty (30) minutes by the Respondent, including the person who will be the project manager on this Contract, followed by up to forty-five (45) minutes of questions and answers. Audiovisual aids may be used during the oral interviews. The oral interviews may be recorded on tape by the Evaluation Team.

The firms interviewed will then be re-evaluated by the above criteria (A through C), and adjustments to scoring will be made as appropriate. After evaluation of the proposals, further negotiation with the selected firm may be pursued leading to the award of a contract by City Council, if suitable proposals are received.

The City reserves the right to not consider any proposal which is determined to be unresponsive and deficient in any of the information requested for evaluation. The City also reserves the right to waive the interview process and evaluate the contractors based on their proposals and fee schedules alone.

The City will determine whether the final scope of the project to be negotiated will be entirely as described in this Request for Proposal, a portion of the scope, or a revised scope.

SECTION IV ATTACHMENTS

Attachment A – Sample Agreement

Attachment B – Legal Status of Bidder

Attachment C – Prevailing Wage Declaration of Compliance

Attachment D – Living Wage Declaration of Compliance and Poster

Attachment E – Contractor(s) Conflict of Interest Disclosure Form

Attachment F – Non-Discrimination Declaration of Compliance and Poster

Attachment G – General Conditions

Attachment H – Fee Proposal Form

Attachment I - A2-INET Network Segments and Site Locations

ATTACHMENT A - SAMPLE AGREEMENT

If a contract is awarded, the selected Firm(s) will be required to adhere to a set of general contract provisions which will become a part of any formal agreement. These provisions are general principles which apply to all contractors/service providers to the City of Ann Arbor. The required provisions are:

THIS AGREEMENT is made on the _____ day of _____, 2016, between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 301 East Huron Street, Ann Arbor, Michigan 48104 ("City") and _____ ("Contractor")

(An individual/partnership/corporation, include state of incorporation) (Address)

Based upon the mutual promises below, the Contractor and the City agree as follows:

ARTICLE I - Scope of Work

The Contractor agrees to furnish all of the materials, equipment and labor necessary; and to abide by all the duties and responsibilities applicable to it for the project titled "On-Call Construction Services" in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, which are incorporated as part of this Contract:

City Nondiscrimination Ordinance	General Conditions
Prevailing Wage Declaration of Compliance Forms	Standard Specifications
Living Wage Declaration of Compliance Forms	Detailed Specifications
Contractor(s) Conflict of Interest Form	Plans
Bid Forms	Addenda
Contract and Exhibits	
Bonds	

ARTICLE II - Definitions

Administering Service Area/Unit means Public Services Area, Project Management.

Supervising Professional or Owner means persons acting under the authorization of the Administrator/Manager of the Administering Service Area/Unit.

Engineer or Owner's Representative means Consulting Professional acting under the authorization of the Supervising Professional/Owner.

Project means _____, No. _____

ARTICLE III - Time of Completion

- (A) The work to be completed under this Contract shall begin immediately on the date specified in the Notice to Proceed issued by the City.
- (B) The entire work for this Contract shall be completed by _____
- (C) Failure to complete all the work within the time specified above, including any extension granted in writing by the Supervising Professional, shall obligate the Contractor to pay the City, as liquidated damages and not as a penalty, an amount equal to \$0.00 for each calendar day of delay in the completion of all the work. If any liquidated damages are unpaid by the Contractor, the City shall be entitled to deduct these unpaid liquidated damages from the monies due the Contractor.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

ARTICLE IV - The Contract Sum

- (A) The City shall pay to the Contractor for the performance of the Contract, the unit prices as given in the Bid Forms for the estimated bid total of:

_____ Dollars (\$_____)
- (B) The amount paid shall be equitably adjusted to cover changes in the work ordered by the Supervising Professional but not required by the Contract Documents. Increases or decreases shall be determined only by written agreement between the City and Contractor.

ARTICLE V - Assignment

- (A) The Contractor shall not subcontract or assign any portion of any right or obligation under this Agreement without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- (B) The Contractor shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

ARTICLE VI - Choice of Law and Forum

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction, excepting the principles of conflicts of law. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United

States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

ARTICLE VII - Relationship of the Parties

The parties of the Contract agree that it is not a Contract of employment but is a Contract to accomplish a specific result. Contractor is an independent Contractor performing services for the City. Nothing contained in this Contract shall be deemed to constitute any other relationship between the City and the Contractor. Each Party will be solely responsible for the acts of its own employees, agents, and servants. No liability, right, or benefit arising out of any employer/employee relationship, either express or implied, shall arise or accrue to any Party as a result of this Agreement.

Contractor certifies that it has no personal or financial interest in the project other than the compensation it is to receive under the Contract. Contractor certifies that it is not, and shall not become, overdue or in default to the City for any Contract, debt, or any other obligation to the City including real or personal property taxes. City shall have the right to set off any such debt against compensation awarded for services under this agreement.

ARTICLE VIII - Notice

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express delivery service, certified mail, or first class U.S. mail postage prepaid. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

ARTICLE IX - Indemnification

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses, including attorney's fees, resulting or alleged to result, from any acts or omissions by Contractor or its employees and agents occurring in the performance of or breach in this Agreement, except to the extent that any suit, claim, judgment or expense are finally judicially determined to have resulted from the City's negligence or willful misconduct or its failure to comply with any of its material obligations set forth in this Agreement.

ARTICLE X - Severability

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

ARTICLE XI - Entire Agreement

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Contractor with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this Agreement. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Agreement, regardless of the other party's failure to object to such form. This Agreement shall be binding on and shall inure to the benefit of the parties to this Agreement and their permitted successors and permitted assigns and nothing in this Agreement, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement. This Agreement may only be altered, amended or modified by written amendment signed by the Contractor and the City. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement.

FOR CONTRACTOR

By _____

Its: _____

FOR THE CITY OF ANN ARBOR

By _____
Christopher Taylor, Mayor

By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

By _____
Howard S. Lazarus
City Administrator

By _____
Tom Crawford, Admin and Financial
Services Area Administrator

Approved as to form and content

Stephen K. Postema, City Attorney

PERFORMANCE BOND

(1) _____ of _____ (referred to as "Principal"), and _____, a corporation duly authorized to do business in the State of Michigan (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for

\$ _____, the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.

(2) The Principal has entered a written Contract with the City dated _____, 201_, for: _____ and _____ this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963, as amended, being MCL 129.201 et seq.

(3) Whenever the Principal is declared by the City to be in default under the Contract, the Surety may promptly remedy the default or shall promptly:

(a) complete the Contract in accordance with its terms and conditions; or

(b) obtain a bid or bids for submission to the City for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, arrange for a Contract between such bidder and the City, and make available, as work progresses, sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which Surety may be liable hereunder, the amount set forth in paragraph 1.

(4) Surety shall have no obligation to the City if the Principal fully and promptly performs under the Contract.

(5) Surety agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder, or the specifications accompanying it shall in any way affect its obligations on this bond, and waives notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work, or to the specifications.

SIGNED AND SEALED this _____ day of _____, 201_.

(Name of Surety Company)

By _____
(Signature)

Its _____
(Title of Office)

Approved as to form:

Stephen K. Postema, City Attorney

(Name of Principal)

By _____
(Signature)

Its _____
(Title of Office)

Name and address of agent:

LABOR AND MATERIAL BOND

- (1) _____
of _____ (referred to as "Principal"), and _____, a corporation duly authorized to do business in the State of Michigan, (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for the use and benefit of claimants as defined in Act 213 of Michigan Public Acts of 1963, as amended, being MCL 129.201 et seq., in the amount of \$ _____, for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.
- (2) The Principal has entered a written Contract with the City, dated _____, 201_, for _____; and this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963 as amended;
- (3) If the Principal fails to promptly and fully repay claimants for labor and material reasonably required under the Contract, the Surety shall pay those claimants.
- (4) Surety's obligations shall not exceed the amount stated in paragraph 1, and Surety shall have no obligation if the Principal promptly and fully pays the claimants.

SIGNED AND SEALED this _____ day of _____, 201_

(Name of Surety Company)

By _____
(Signature)

Its _____
(Title of Office)

Approved as to form:

Stephen K. Postema, City Attorney

(Name of Principal)

By _____
(Signature)

Its _____
(Title of Office)

Name and address of agent:

**ATTACHMENT B
LEGAL STATUS OF BIDDER**

(The Bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:

* A corporation organized and doing business under the laws of the State of _____, for whom _____, bearing the office title of _____, whose signature is affixed to this Bid, is authorized to execute contracts.

NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority

• A limited liability company doing business under the laws of the State of _____, whom _____ bearing the title of _____ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.

* A partnership, organized under the laws of the state of _____ and filed in the county of _____, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary):

* An individual, whose signature with address, is affixed to this Bid: _____
(initial here)

Authorized Official

_____ **Date** _____, 201__

(Print) Name _____ Title _____

Company: _____

Address: _____

Contact Phone () _____ Fax () _____

Email _____

**CITY OF ANN ARBOR
LIVING WAGE ORDINANCE**

RATE EFFECTIVE APRIL 30, 2016 - ENDING APRIL 29, 2017

\$12.93 per hour

If the employer provides health care benefits*

\$14.43 per hour

If the employer does **NOT** provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

ENFORCEMENT

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

**For Additional Information or to File a Complaint Contact
Colin Spencer at 734/794-6500 or cspencer@a2gov.org**



ATTACHMENT E

Vendor Conflict of Interest Disclosure Form
--

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

Conflict of Interest Disclosure*	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	<input type="checkbox"/> Relationship to employee <hr style="border: 0; border-top: 1px solid black;"/> <input type="checkbox"/> Interest in vendor's company <input type="checkbox"/> Other (please describe in box below)

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:		
Vendor Name	Vendor Phone Number	
Signature of Vendor Authorized Representative	Date	Printed Name of Vendor Authorized Representative

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org

CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below. You can review the entire ordinance at www.a2gov.org/departments/city-clerk

Intent: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

Discriminatory Employment Practices: No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

Discriminatory Effects: No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual has a grievance alleging a violation of this chapter, he/she has 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the alleged discriminatory action to file a complaint with the city's Human Rights Commission. If an individual fails to file a complaint alleging a violation of this chapter within the specified time frame, the complaint will not be considered by the Human Rights Commission. The complaint should be made in writing to the Human Rights Commission. The complaint may be filed in person with the City Clerk, by e-mail (hrc@a2gov.org), by phone (734-794-6141) or by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107). The complaint must contain information about the alleged discrimination, such as name, address, phone number of the complainant and location, date and description of the alleged violation of this chapter.

Private Actions For Damages or Injunctive Relief: To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.

THIS IS AN OFFICIAL GOVERNMENT NOTICE AND
MUST BE DISPLAYED WHERE EMPLOYEES CAN READILY SEE IT.

ATTACHMENT G - GENERAL CONDITIONS

Section 1 - Execution, Correlation and Intent of Documents

The contract documents shall be signed in 2 copies by the City and the Contractor.

The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words which so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the contract documents listed below in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

(1) Addenda in reverse chronological order; (2) Detailed Specifications; (3) Standard Specifications; (4) Plans; (5) General Conditions; (6) Contract; (7) Bid Forms; (8) Bond Forms; (9) Bid.

Section 2 - Order of Completion

The Contractor shall submit with each invoice, and at other times reasonably requested by the Supervising Professional, schedules showing the order in which the Contractor proposes to carry on the work. They shall include the dates at which the Contractor will start the several parts of the work, the estimated dates of completion of the several parts, and important milestones within the several parts.

Section 3 - Familiarity with Work

The Bidder or its representative shall make personal investigations of the site of the work and of existing structures and shall determine to its own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved, and all other factors affecting the work proposed under this Contract. The Bidder to whom this Contract is awarded will not be entitled to any additional compensation unless conditions are clearly different from those which could reasonably have been anticipated by a person making diligent and thorough investigation of the site.

The Bidder shall immediately notify the City upon discovery, and in every case prior to submitting its Bid, of every error or omission in the bidding documents that would be identified by a reasonably competent, diligent Bidder. In no case will a Bidder be allowed the benefit of extra compensation or time to complete the work under this Contract for extra expenses or time spent as a result of the error or omission.

Section 4 - Wage Requirements

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen,

mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section."

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

If the Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Agreement a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision covering subcontractor's employees who perform work on this contract.

Section 5 - Non-Discrimination

The Contractor agrees to comply, and to require its subContractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of Title IX of the Ann Arbor City Code, and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

Section 6 - Materials, Appliances, Employees

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary or used for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and materials shall be of the highest quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among its employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work assigned.

Adequate sanitary facilities shall be provided by the Contractor.

Section 7 - Qualifications for Employment

The Contractor shall employ competent laborers and mechanics for the work under this Contract. For work performed under this Contract, employment preference shall be given to qualified local residents.

Section 8 - Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringements of any patent rights and shall hold the City harmless from loss on account of infringement except that the City shall be responsible for all infringement loss when a particular process or the product of a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process or product is patented or is believed to be patented.

Section 9 - Permits and Regulations

The Contractor must secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the contract documents are at variance with those requirements, it shall promptly notify the Supervising Professional in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

Section 10 - Protection of the Public and of Work and Property

The Contractor is responsible for the means, methods, sequences, techniques and procedures of construction and safety programs associated with the work contemplated by this contract. The Contractor, its agents or sub-contractors, shall comply with the "General Rules and Regulations for the Construction Industry" as published by the Construction Safety Commission of the State of Michigan and to all other local, State and National laws, ordinances, rules and regulations pertaining to safety of persons and property.

The Contractor shall take all necessary and reasonable precautions to protect the safety of the public. It shall continuously maintain adequate protection of all work from damage, and shall take all necessary and reasonable precautions to adequately protect all public and private property from injury or loss arising in connection with this Contract. It shall make good any damage, injury or loss to its work and to public and private property resulting from lack of reasonable protective precautions, except as may be due to errors in the contract documents, or caused by agents or employees of the City. The Contractor shall obtain and maintain sufficient insurance to cover damage to any City property at the site by any cause.

In an emergency affecting the safety of life, or the work, or of adjoining property, the Contractor is, without special instructions or authorization from the Supervising Professional, permitted to act at its discretion to prevent the threatened loss or injury. It shall also so act, without appeal, if authorized or instructed by the Supervising Professional.

Any compensation claimed by the Contractor for emergency work shall be determined by agreement or in accordance with the terms of Claims for Extra Cost - Section 15.

Section 11 - Inspection of Work

The City shall provide sufficient competent personnel for the inspection of the work.

The Supervising Professional shall at all times have access to the work whenever it is in

preparation or progress, and the Contractor shall provide proper facilities for access and for inspection.

If the specifications, the Supervising Professional's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Supervising Professional timely notice of its readiness for inspection, and if the inspection is by an authority other than the Supervising Professional, of the date fixed for the inspection. Inspections by the Supervising Professional shall be made promptly, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Supervising Professional, it must, if required by the Supervising Professional, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Supervising Professional, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to be in accordance with the contract documents, the City shall pay the cost of re-examination and replacement. If the work is not in accordance with the contract documents, the Contractor shall pay the cost.

Section 12 - Superintendence

The Contractor shall keep on the work site, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Supervising Professional. The superintendent will be responsible to perform all on-site project management for the Contractor. The superintendent shall be experienced in the work required for this Contract. The superintendent shall represent the Contractor and all direction given to the superintendent shall be binding as if given to the Contractor. Important directions shall immediately be confirmed in writing to the Contractor. Other directions will be confirmed on written request. The Contractor shall give efficient superintendence to the work, using its best skill and attention.

Section 13 - Changes in the Work

The City may make changes to the quantities of work within the general scope of the Contract at any time by a written order and without notice to the sureties. If the changes add to or deduct from the extent of the work, the Contract Sum shall be adjusted accordingly. All the changes shall be executed under the conditions of the original Contract except that any claim for extension of time caused by the change shall be adjusted at the time of ordering the change.

In giving instructions, the Supervising Professional shall have authority to make minor changes in the work not involving extra cost and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Supervising Professional, and no claim for an addition to the Contract Sum shall be valid unless the additional work was ordered in writing.

The Contractor shall proceed with the work as changed and the value of the work shall be determined as provided in Claims for Extra Cost - Section 15.

Section 14 - Extension of Time

Extension of time stipulated in the Contract for completion of the work will be made if and as the Supervising Professional may deem proper under any of the following circumstances:

- (1) When work under an extra work order is added to the work under this Contract;

- (2) When the work is suspended as provided in Section 20;
- (3) When the work of the Contractor is delayed on account of conditions which could not have been foreseen, or which were beyond the control of the Contractor, and which were not the result of its fault or negligence;
- (4) Delays in the progress of the work caused by any act or neglect of the City or of its employees or by other Contractors employed by the City;
- (5) Delay due to an act of Government;
- (6) Delay by the Supervising Professional in the furnishing of plans and necessary information;
- (7) Other cause which in the opinion of the Supervising Professional entitles the Contractor to an extension of time.

The Contractor shall notify the Supervising Professional within 7 days of an occurrence or conditions which, in the Contractor's opinion, entitle it to an extension of time. The notice shall be in writing and submitted in ample time to permit full investigation and evaluation of the Contractor's claim. The Supervising Professional shall acknowledge receipt of the Contractor's notice within 7 days of its receipt. Failure to timely provide the written notice shall constitute a waiver by the Contractor of any claim.

In situations where an extension of time in contract completion is appropriate under this or any other section of the contract, the Contractor understands and agrees that the only available adjustment for events that cause any delays in contract completion shall be extension of the required time for contract completion and that there shall be no adjustments in the money due the Contractor on account of the delay.

Section 15 - Claims for Extra Cost

If the Contractor claims that any instructions by drawings or other media issued after the date of the Contract involved extra cost under this Contract, it shall give the Supervising Professional written notice within 7 days after the receipt of the instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property. The procedure shall then be as provided for Changes in the Work-Section I3. No claim shall be valid unless so made.

If the Supervising Professional orders, in writing, the performance of any work not covered by the contract documents, and for which no item of work is provided in the Contract, and for which no unit price or lump sum basis can be agreed upon, then the extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- (1) The Contractor shall be reimbursed for all reasonable costs incurred in doing the work, and shall receive an additional payment of 15% of all the reasonable costs to cover both its indirect overhead costs and profit;
- (2) The term "Cost" shall cover all payroll charges for employees and supervision required under the specific order, together with all worker's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed upon rates, together with cost of fuel and supply charges for the equipment; and any costs incurred by the Contractor as a direct result of executing the order, if approved by the Supervising Professional;

- (3) If the extra is performed under subcontract, the subcontractor shall be allowed to compute its charges as described above. The Contractor shall be permitted to add an additional charge of 5% percent to that of the subcontractor for the Contractor's supervision and contractual responsibility;
- (4) The quantities and items of work done each day shall be submitted to the Supervising Professional in a satisfactory form on the succeeding day, and shall be approved by the Supervising Professional and the Contractor or adjusted at once;
- (5) Payments of all charges for work under this Section in any one month shall be made along with normal progress payments. Retainage shall be in accordance with Progress Payments-Section 16.

No additional compensation will be provided for additional equipment, materials, personnel, overtime or special charges required to perform the work within the time requirements of the Contract.

When extra work is required and no suitable price for machinery and equipment can be determined in accordance with this Section, the hourly rate paid shall be 1/40 of the basic weekly rate listed in the Rental Rate Blue Book published by Dataquest Incorporated and applicable to the time period the equipment was first used for the extra work. The hourly rate will be deemed to include all costs of operation such as bucket or blade, fuel, maintenance, "regional factors", insurance, taxes, and the like, but not the costs of the operator.

Section 16 - Progress Payments

The Contractor shall submit each month, or at longer intervals, if it so desires, an invoice covering work performed for which it believes payment, under the Contract terms, is due. The submission shall be to the City's Finance Department - Accounting Division. The Supervising Professional will, within 10 days following submission of the invoice, prepare a certificate for payment for the work in an amount to be determined by the Supervising Professional as fairly representing the acceptable work performed during the period covered by the Contractor's invoice. To insure the proper performance of this Contract, the City will retain a percentage of the estimate in accordance with Act 524, Public Acts of 1980. The City will then, following the receipt of the Supervising Professional's Certificate, make payment to the Contractor as soon as feasible, which is anticipated will be within 15 days.

An allowance may be made in progress payments if substantial quantities of permanent material have been delivered to the site but not incorporated in the completed work if the Contractor, in the opinion of the Supervising Professional, is diligently pursuing the work under this Contract. Such materials shall be properly stored and adequately protected. Allowance in the estimate shall be at the invoice price value of the items. Notwithstanding any payment of any allowance, all risk of loss due to vandalism or any damages to the stored materials remains with the Contractor.

In the case of Contracts which include only the Furnishing and Delivering of Equipment, the payments shall be; 60% of the Contract Sum upon the delivery of all equipment to be furnished, or in the case of delivery of a usable portion of the equipment in advance of the total equipment delivery, 60% of the estimated value of the portion of the equipment may be paid upon its delivery in advance of the time of the remainder of the equipment to be furnished; 30% of the Contract Sum upon completion of erection of all equipment furnished, but not later than 60 days after the date of delivery of all of the equipment to be furnished; and payment of the final 10% on final completion of erection, testing and acceptance of all the equipment to be furnished; but not later than 180 days after the date of delivery of all of the equipment to be furnished, unless testing has

been completed and shows the equipment to be unacceptable.

With each invoice for periodic payment, the Contractor shall enclose a Contractor's Declaration - Section 43, and an updated project schedule per Order of Completion - Section 2.

Section 17 - Deductions for Uncorrected Work

If the Supervising Professional decides it is inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

Section 18 - Correction of Work Before Final Payment

The Contractor shall promptly remove from the premises all materials condemned by the Supervising Professional as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other contractors destroyed or damaged by the removal or replacement.

If the Contractor does not remove the condemned work and materials within 10 days after written notice, the City may remove them and, if the removed material has value, may store the material at the expense of the Contractor. If the Contractor does not pay the expense of the removal within 10 days thereafter, the City may, upon 10 days written notice, sell the removed materials at auction or private sale and shall pay to the Contractor the net proceeds, after deducting all costs and expenses that should have been borne by the Contractor. If the removed material has no value, the Contractor must pay the City the expenses for disposal within 10 days of invoice for the disposal costs.

The inspection or lack of inspection of any material or work pertaining to this Contract shall not relieve the Contractor of its obligation to fulfill this Contract and defective work shall be made good. Unsuitable materials may be rejected by the Supervising Professional notwithstanding that the work and materials have been previously overlooked by the Supervising Professional and accepted or estimated for payment or paid for. If the work or any part shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good the defect in a manner satisfactory to the Supervising Professional. The judgment and the decision of the Supervising Professional as to whether the materials supplied and the work done under this Contract comply with the requirements of the Contract shall be conclusive and final.

Section 19 - Acceptance and Final Payment

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Supervising Professional will promptly make the inspection. When the Supervising Professional finds the work acceptable under the Contract and the Contract fully performed, the Supervising Professional will promptly sign and issue a final certificate stating that the work required by this Contract has been completed and is accepted by the City under the terms and conditions of the Contract. The entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of the final certificate.

Before issuance of final certificates, the Contractor shall file with the City:

- (1) The consent of the surety to payment of the final estimate;
- (2) The Contractor's Affidavit in the form required by Section 44.

In case the Affidavit or consent is not furnished, the City may retain out of any amount due the Contractor, sums sufficient to cover all lienable claims.

The making and acceptance of the final payment shall constitute a waiver of all claims by the City except those arising from:

- (1) unsettled liens;
- (2) faulty work appearing within 12 months after final payment;
- (3) hidden defects in meeting the requirements of the plans and specifications;
- (4) manufacturer's guarantees.

It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

Section 20 - Suspension of Work

The City may at any time suspend the work, or any part by giving 5 days notice to the Contractor in writing. The work shall be resumed by the Contractor within 10 days after the date fixed in the written notice from the City to the Contractor to do so. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this Contract as a result of the suspension.

If the work, or any part, shall be stopped by the notice in writing, and if the City does not give notice in writing to the Contractor to resume work at a date within 90 days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work suspended and will be entitled to the estimates and payments for all work done on the portions abandoned, if any, plus 10% of the value of the work abandoned, to compensate for loss of overhead, plant expense, and anticipated profit.

Section 21 - Delays and the City's Right to Terminate Contract

If the Contractor refuses or fails to prosecute the work, or any separate part of it, with the diligence required to insure completion, ready for operation, within the allowable number of consecutive calendar days specified plus extensions, or fails to complete the work within the required time, the City may, by written notice to the Contractor, terminate its right to proceed with the work or any part of the work as to which there has been delay. After providing the notice the City may take over the work and prosecute it to completion, by contract or otherwise, and the Contractor and its sureties shall be liable to the City for any excess cost to the City. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work, any materials, appliances and plant as may be on the site of the work and useful for completing the work. The right of the Contractor to proceed shall not be terminated or the Contractor charged with liquidated damages where an extension of time is granted under Extension of Time - Section 14.

If the Contractor is adjudged a bankrupt, or if it makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of its insolvency, or if it persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if it fails to make prompt payments to subcontractors or for material or labor, or persistently disregards laws, ordinances or the instructions of the Supervising Professional, or otherwise is guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Supervising Professional that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor 3 days written notice, terminate this Contract. The City may then take possession of the premises

and of all materials, tools and appliances thereon and without prejudice to any other remedy it may have, make good the deficiencies or finish the work by whatever method it may deem expedient, and deduct the cost from the payment due the Contractor. The Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of finishing the work, including compensation for additional managerial and administrative services exceeds the unpaid balance of the Contract Sum, the Contractor and its surety are liable to the City for any excess cost incurred. The expense incurred by the City, and the damage incurred through the Contractor's default, shall be certified by the Supervising Professional.

Section 22 - Contractor's Right to Terminate Contract

If the work should be stopped under an order of any court, or other public authority, for a period of 3 months, through no act or fault of the Contractor or of anyone employed by it, then the Contractor may, upon 7 days written notice to the City, terminate this Contract and recover from the City payment for all acceptable work executed plus reasonable profit.

Section 23 - City's Right To Do Work

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City, 3 days after giving written notice to the Contractor and its surety may, without prejudice to any other remedy the City may have, make good the deficiencies and may deduct the cost from the payment due to the Contractor.

Section 24 - Removal of Equipment and Supplies

In case of termination of this Contract before completion, from any or no cause, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City, failing which the City shall have the right to remove the equipment and supplies at the expense of the Contractor.

The removed equipment and supplies may be stored by the City and, if all costs of removal and storage are not paid by the Contractor within 10 days of invoicing, the City upon 10 days written notice may sell the equipment and supplies at auction or private sale, and shall pay the Contractor the net proceeds after deducting all costs and expenses that should have been borne by the Contractor and after deducting all amounts claimed due by any lien holder of the equipment or supplies.

Section 25 - Responsibility for Work and Warranties

The Contractor assumes full responsibility for any and all materials and equipment used in the construction of the work and may not make claims against the City for damages to materials and equipment from any cause except negligence or willful act of the City. Until its final acceptance, the Contractor shall be responsible for damage to or destruction of the project (except for any part covered by Partial Completion and Acceptance - Section 26). The Contractor shall make good all work damaged or destroyed before acceptance. All risk of loss remains with the Contractor until final acceptance of the work (Section 19) or partial acceptance (Section 26). The Contractor is advised to investigate obtaining its own builders risk insurance.

The Contractor shall guarantee the quality of the work for a period of one year. The Contractor shall also unconditionally guarantee the quality of all equipment and materials that are furnished and installed under the contract for a period of one year. At the end of one year after the Contractor's receipt of final payment, the complete work, including equipment and materials furnished and installed under the contract, shall be inspected by the Contractor and the

Supervising Professional. Any defects shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. Any defects that are identified prior to the end of one year shall also be inspected by the Contractor and the Supervising Professional and shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. The Contractor shall assign all manufacturer or material supplier warranties to the City prior to final payment. The assignment shall not relieve the Contractor of its obligations under this paragraph to correct defects.

Section 26 - Partial Completion and Acceptance

If at any time prior to the issuance of the final certificate referred to in Acceptance and Final Payment - Section 19, any portion of the permanent construction has been satisfactorily completed, and if the Supervising Professional determines that portion of the permanent construction is not required for the operations of the Contractor but is needed by the City, the Supervising Professional shall issue to the Contractor a certificate of partial completion, and immediately the City may take over and use the portion of the permanent construction described in the certificate, and exclude the Contractor from that portion.

The issuance of a certificate of partial completion shall not constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates if the Contractor has failed to complete it in accordance with the terms of this Contract. The issuance of the certificate shall not release the Contractor or its sureties from any obligations under this Contract including bonds.

If prior use increases the cost of, or delays the work, the Contractor shall be entitled to extra compensation, or extension of time, or both, as the Supervising Professional may determine.

Section 27 - Payments Withheld Prior to Final Acceptance of Work

The City may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to the extent reasonably appropriate to protect the City from loss on account of:

- (1) Defective work not remedied;
- (2) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor;
- (3) Failure of the Contractor to make payments properly to subcontractors or for material or labor;
- (4) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the City which will protect the City in the amount withheld, payment shall be made for amounts withheld under this section.

Section 28 - Contractor's Insurance

- (1) The Contractor shall procure and maintain during the life of this Contract, including the guarantee period and during any warranty work, such insurance policies, including those set forth below, as will protect itself and the City from all claims for bodily injuries, death

or property damage which may arise under this Contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor or by any subcontractor or anyone employed by them directly or indirectly. In the case of all contracts involving on-site work, the Contractor shall provide to the City, before the commencement of any work under this contract, certificates of insurance and other documentation satisfactory to the City demonstrating it has obtained the policies and endorsements required on behalf of itself, and when requested, any subContractor(s). The certificates of insurance endorsements and/or copies of policy language shall document that the Contractor satisfies the following minimum requirements.

- (a) Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident
Bodily Injury by Disease - \$500,000 each employee
Bodily Injury by Disease - \$500,000 each policy limit

- (b) Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98 or current equivalent. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements specifically for the following coverages: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further there shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. The following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property
Damage Liability, or both combined.
\$2,000,000 Per Job General Aggregate
\$1,000,000 Personal and Advertising Injury
\$2,000,000 Products and Completed Operations Aggregate

- (c) Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

- (d) Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- (2) Insurance required under subsection (1)(b) and (1)(c) above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.

- (3) Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this Contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.
- (4) Any Insurance provider of Contractor shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.
- (5) City reserves the right to require additional coverage and/or coverage amounts as may be included from time to time in the Detailed Specifications for the Project.
- (6) The provisions of General Condition 28 shall survive the expiration or earlier termination of this contract for any reason.

Section 29 - Surety Bonds

Bonds will be required from the successful bidder as follows:

- (1) A Performance Bond to the City of Ann Arbor for the amount of the bid(s) accepted;
- (2) A Labor and Material Bond to the City of Ann Arbor for the amount of the bid(s) accepted.

Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company authorized to transact business in Michigan and satisfactory to the City Attorney.

Section 30 - Damage Claims

The Contractor shall be held responsible for all damages to property of the City or others, caused by or resulting from the negligence of the Contractor, its employees, or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. The Contractor must restore all property injured including sidewalks, curbing, sodding, pipes, conduit, sewers or other public or private property to not less than its original condition with new work.

Section 31 - Refusal to Obey Instructions

If the Contractor refuses to obey the instructions of the Supervising Professional, the Supervising Professional shall withdraw inspection from the work, and no payments will be made for work performed thereafter nor may work be performed thereafter until the Supervising Professional shall have again authorized the work to proceed.

Section 32 - Assignment

Neither party to the Contract shall assign the Contract without the written consent of the other. The Contractor may assign any monies due to it to a third party acceptable to the City.

Section 33 - Rights of Various Interests

Whenever work being done by the City's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Supervising Professional, to secure the completion of the various portions of the work in general harmony.

The Contractor is responsible to coordinate all aspects of the work, including coordination of, and with, utility companies and other contractors whose work impacts this project.

Section 34 - Subcontracts

The Contractor shall not award any work to any subcontractor without prior written approval of the City. The approval will not be given until the Contractor submits to the City a written statement concerning the proposed award to the subcontractor. The statement shall contain all information the City may require.

The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and all other contract documents applicable to the work of the subcontractors and to give the Contractor the same power to terminate any subcontract that the City may exercise over the Contractor under any provision of the contract documents.

Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the City.

Section 35 - Supervising Professional's Status

The Supervising Professional has the right to inspect any or all work. The Supervising Professional has authority to stop the work whenever stoppage may be appropriate to insure the proper execution of the Contract. The Supervising Professional has the authority to reject all work and materials which do not conform to the Contract and to decide questions which arise in the execution of the work.

The Supervising Professional shall make all measurements and determinations of quantities. Those measurements and determinations are final and conclusive between the parties.

Section 36 - Supervising Professional's Decisions

The Supervising Professional shall, within a reasonable time after their presentation to the Supervising Professional, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents.

Section 37 - Storing Materials and Supplies

Materials and supplies may be stored at the site of the work at locations agreeable to the City unless specific exception is listed elsewhere in these documents. Ample way for foot traffic and drainage must be provided, and gutters must, at all times, be kept free from obstruction. Traffic on streets shall be interfered with as little as possible. The Contractor may not enter or occupy with agents, employees, tools, or material any private property without first obtaining written permission from its owner. A copy of the permission shall be furnished to the Supervising Professional.

Section 38 - Lands for Work

The Contractor shall provide, at its own expense and without liability to the City, any additional land and access that may be required for temporary construction facilities or for storage of materials.

Section 39 - Cleaning Up

The Contractor shall, as directed by the Supervising Professional, remove at its own expense from the City's property and from all public and private property all temporary structures, rubbish and waste materials resulting from its operations unless otherwise specifically approved, in writing, by the Supervising Professional.

Section 40 - Salvage

The Supervising Professional may designate for salvage any materials from existing structures or underground services. Materials so designated remain City property and shall be transported or stored at a location as the Supervising Professional may direct.

Section 41 - Night, Saturday or Sunday Work

No night or Sunday work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

Section 42 - Sales Taxes

Under State law the City is exempt from the assessment of State Sales Tax on its direct purchases. Contractors who acquire materials, equipment, supplies, etc. for incorporation in City projects are not likewise exempt. State Law shall prevail. The Bidder shall familiarize itself with the State Law and prepare its Bid accordingly. No extra payment will be allowed under this Contract for failure of the Contractor to make proper allowance in this bid for taxes it must pay.

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ATTACHMENT H – FEE PROPOSAL FORM^{1, 2, 3,4}

Respondent Company Name and Address:

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Network Segment Construction/Site Location Connection per Attachment I, Table 1.	Print #:		
	SINGLE BASE BID		
	Per ft Amount	Est. Footage ¹	Subtotal (\$)
Fiber Construction per foot for new aerial construction	\$		
Fiber Construction per foot for overlash	\$		
Fiber Construction per foot to pull through existing conduit	\$		
Fiber Construction per foot for new underground installation (Boring) including conduit	\$		
Fiber Construction per foot for new underground installation (Plowing if required) including conduit	\$		
Subtotal			\$
	Per Splice	Total # Splices	Subtotal
Fiber OSP Construction price per splice for 48 count loose tube	\$		\$
Fiber OSP Construction price per splice for 144 count loose tube	\$		\$
All Other Material Costs (see Table 1 and Attachment I)			\$
All Labor Costs			\$
Subcontractors			\$
Other Costs (specify)			\$
Total Cost Estimate			\$

ATTACHMENT H – FEE PROPOSAL FORM^{1, 2, 3, 4}

¹ Use estimated footage for each Network Segment and/or Site Location provided in Table 1 and Attachment I.

² **Fiber Optic, Cable, Single Mode Fiber, 144F** includes furnishing and installing, outdoor-rated 144-conductor fiber optic cable. **Fiber Optic, Cable, Single Mode Fiber, 48F** includes furnishing and installing outdoor-rated 48-conductor fiber optic cable.

³ **Fusion Splices.** Fusion Splice will be measured in units of each and will be paid for at the contract unit price for each.

⁴ **Material Costs.** Include all material costs per Attachment I and/or Table 1 specifications for each Network Segment and/or Site Location. This price shall include the furnishing of all materials and installation.

ATTACHMENT I – NETWORK SEGMENTS

Print #	Aerial	OHG	Overlash	DTE Pole	AT&T Pole	Foreign Pole	Anchor	Sidewalk Anchor	Pole Riser	Existing UG	New UG	Existing Handhole	New Handhole	New Cabinet	End Splice Point	Midsheath Splice Point	Aerial Storage Loop	UG Storage Loop	R/R SW Flags	No Tape Conduit Issues	Short Duct Issue
145-288	3,933	261		25	5		21		1		1,072		1				2	1			
145-290	3,049			18	4		10		1		235		1				1	1			
148-280																					
148-282										3,986	125	16	1		1			3		811	5
148-284	3,815	196		29	7		14	1	3	1,897	404	8	1	1		2	2	1	1		8
148-286										2,334		6						2			
148-288	1,687	165		4	14		6		2	3,128	6	9			1		1	2		796	6
148-290										1,231	425	7	2					2			
151-274	2,690			13	5		9										1				
151-276	2,337	50		4	18		8										2				
151-278	1,208			10	2		3		1	1,117	205	4						1		372	
151-280										2,622	67	10						2	2	969	
151-286	435	67			4		1										1				
151-288	2,159	120		3	16		5														
151-290	1,629			14			6			2,786	330	4	2				1	2			
154-270										1,020		2									452
154-272										3,308	365	14	1			1		3		662	
154-274	3,898	320		12	25		15		3	1,074	257	5			1		2			586	
154-286	4,565	121	438	19	21		5		2		510				1			3	2		
154-288					1		1														
154-290	612			3		2	1			723	776	3	2					1			
157-264											1,540		3					1	1		
157-266	3,899			20			7		1							1	2				
157-268	3,748			23			9		1	512						1	1				
157-270										3,121	605	15	2			1		4			5
157-282										2,649	400	11			1			1	1	1,540	
157-284	931	224	378	12	3		2		2	5,982	1,691	42	2			4			19	1,136	21
157-286	3,572	1,120	258	39	6		13		5	42	252	2				1	2		7		6
160-266	521			3			2		1	794	1,809	13			1			2		1,189	
160-268	817			5	1		3		1		77						1				
160-270										2,251	1,219	11	4		1			6			5
160-272										2,024	672	11	2			1		3	1		
160-274	622			4			1		1	2,300	18	5			1			1			
160-276	1,277			9	1		2				85	1					1				
160-278	2,844	267		23	3		4	1	1	70	1	2					2	1			
160-280	3,741	213		38	2		10	1	1	324	9	4					1		1		9

Print #	Aerial	OHG	Overlash	DTE Pole	AT&T Pole	Foreign Pole	Anchor	Sidewalk Anchor	Pole Riser	Existing UG	New UG	Existing Handhole	New Handhole	New Cabinet	End Splice Point	Midsheath Splice Point	Aerial Storage Loop	UG Storage Loop	R/R SW Flags	No Tape Conduit Issues	Short Duct Issue	
160-282	2,235	54		25			6		3	1,119	335	8				1	3		1		3	
160-284										4,057		16			1			2		966		
160-286										3,254	1,185	20	2			1		4		894		
160-288										1,522	1,107	11						2		670		
160-290										169	731	5						1				
163-266										3,146	187	5						1		3,146		
163-268	547			4			3										1					
163-272										988		1						1				
163-274	2,218	92		13	8		3		1	2,817	130	7				1	1			555		
163-276	2,841			24	4		8		2	1,386	306	3				1	1	1		870		
163-278	5,048	157		30	12		7								1		2					
163-280	1,722	369		18			5									1						
163-286										414	385	3						1	2			
163-290										1,052	2,515	12	1		1			2		211		
163-292	1,579			11			6		1		35						1					
166-264										2,177		7						2				
166-266	1,660	123		13			2		2	3,014	659	12					1	3			9	
166-268	1,346			9			6		1	741	82	4						1	1			
166-270	3,906	60		19	9		6	2	2	253	110	1			1	1	1					
166-272	2,431	138		2	19		4		1	746	727	3				1	2	1				
166-274	2,893	47		16	12		3									1	2					
166-276	685			8			1		1		130	1										
166-290										1,113		2						1		1,113		
166-292										3,781	1,358	13	3			2		2	1	872	5	
166-294										1,298			2					1				
169-274	3,516			22	7		2	1	1		354				1		1		1			
169-276	1,938			14	2		4										2					
169-282										2,115	195	12			1			2		258		
169-284										225	3,968	6	5					3				
169-286	1,460			10				1	1		2,430		3				1	1				
169-292	777			7			4		2	3,040	275	11				1		2		725		
172-276	2,977			25			4										1					
172-278	403			3			1															
172-280	3,013	103		8	13		4		1	573	415	3				1	2					
172-282																						
172-286	1,797	168		10			5										1					
172-288	2,117			18			4										1					
172-290	2,238			14			4										1					
172-292	593			4			1		2	1,306	1,522	4	3			1		2		887		

Print #	Aerial	OHG	Overlash	DTE Pole	AT&T Pole	Foreign Pole	Anchor	Sidewalk Anchor	Pole Riser	Existing UG	New UG	Existing Handhole	New Handhole	New Cabinet	End Splice Point	Midsheath Splice Point	Aerial Storage Loop	UG Storage Loop	R/R SW Flags	No Tape Conduit Issues	Short Duct Issue
172-294										1,664	56	9	2	1	1			2	1	129	5
175-276	2,622	329		22			7										1				
175-278	4,982	490		31		1	15		1		150				1	1	2				
175-280	165					1															
178-280	3,791			25			7		1		115						3				

Totals	115,48	5,25									32,61										
:	9	4	1,074	735	224	4	280	7	50	87,265	7	384	45	2	16	26	54	81	42	19,809	87

**Total
Aerial &
UG
Footage: 235,371**

Location	Address	Print #	Entry Type	Interior Footage	Rack/Wall Mount PP	Comments	Fiber Patch Panel	Qty	Fiber Inserts	Qty	Trip Lite Secure Wall Cabinet	Qty	Copper 5E Patch Panel	Qty
HOUSING COMMISSION/MILLER	726 Miller Rd	154-286	New UG	32	Wall	Enter into MDF - R/R Sidewalk Flag	CCH-01U	1	CCH-CP12-A9	1				
MACK POOL	715 Brooks St	154-286	New UG	100	Wall	R/R Asphalt at Building - Interior EMT	CCH-01U	1	CCH-CP12-A9	1				
WATER TREATMENT PLANT	919 Sunset Rd	154-290	2 Entries - UG & Aerial	331/50	2 Rack	2 locations - Tall Ceilings - Interior EMT	CCH-01U	1	CCH-CP12-A9	1				
SENIOR CENTER	1320 Baldwin Ave.	163-278	New Aerial	15	Wall	Enter into MDF	WCH-02P	1	CCH-CP12-A9	1				
BUHR PARK	2751 Packard St.	166-272	New UG	10	Wall	Enter into MDF	CCH-01U	1	CCH-CP12-A9	1				
WATER UTILITIES FIELD OPS	2000 S. Industrial	160-276	New UG	20	Wall	Enter into MDF	WCH-02P	1	CCH-CP12-A9	1				
MUNICIPAL AIRPORT	801 Airport Dr.	157-264	New UG	10	Wall	Enter into MDF - Below Grade Entry - R/R Sidewalk Flag	WCH-02P	1	CCH-CP12-A9	1				
FIELD OPERATIONS CENTER/SDC (2 Entries)	4251 Stone School Rd	166-294	Existing Duct both Entries	20	Rack	Existing Ducts into MDF	CCH-04U	3	CCH-CP24-A9	18				
WASTEWATER TREATMENT	49 Dixboro Road	178-280	New UG	480	Rack	Interior EMT	CCH-01U	1	CCH-CP12-A9	1				
GALLUP CANOE LIVERY	3000 Fuller Road	169-282	New UG	10	Wall	Enter into MDF	CCH-01U	1	CCH-CP12-A9	1				
HURON HILLS GOLF COURSE CLUBHOUSE	3465 E Huron River Drive	172-280	Existing Duct	10	Wall	Enter into MDF	CCH-01U	1	CCH-CP12-A9	1				
LESLIE GOLF COURSE CLUBHOUSE	2120 Traver Rd	163-292	Aerial	10	Wall	Enter into MDF	CCH-01U	1	CCH-CP12-A9	1				
AA-SALINE PARK & RIDE	Ann Arbor-Saline Rd	154-272	New UG	0	N/A	Leave storage in new handhole								
MILLER RD PARK & RIDE	Miller Rd & M-14	145-290	New UG	0	N/A	Leave storage in new handhole								
PLYMOUTH RD PARK & RIDE	Plymouth Rd and US-23	172-294	New UG	0	N/A	Leave storage in new handhole								
GREEN RD PARK & RIDE	Green Rd	172-292	New UG	0	N/A	Leave storage in new handhole								
STATE ST PARK & RIDE #1	State St	160-272	New UG	0	N/A	Leave sp/storage in new handhole - 1 R/R Large Sidewalk								
STATE ST PARK & RIDE #2	State St	160-272	New UG	0	N/A	Leave storage in new handhole								
LIBERTY ST PUMP STATION	2675 W. Liberty St	148-282	New duct	50	Wall	Enter into MDF	WCH-02P	1	CCH-CP12-A9	1				
CABINET AT STADIUM & HENRY¹		160-278	Existing Duct	N/A	N/A	Leave storage in existing handhole								
CABINET AT NE CORNER OF EISENHOWER & STATE¹		160-270	New UG	N/A	N/A	Leave storage in new handhole								
CABINET AT SE CORNER OF STATE & ELLSWORTH¹		160-266	New UG	N/A	N/A	Leave storage in existing handhole								
MANCHESTER TANK	2111 Manchester Rd	166-276	New UG	50	Wall	Has existing handhole - Exterior EMT	WCH-02P	1	CCH-CP12-A9	1				
NORTH CAMPUS TANK	3150 Plymouth Rd	169-292	New UG	50	Wall	Has existing handhole - Exterior EMT	WCH-02P	1	CCH-CP12-A9	1				

Location	Address	Print #	Entry Type	Interior Footage	Rack/Wall Mount PP	Comments	Fiber Patch Panel	Qty	Fiber Inserts	Qty	Trip Lite Secure Wall Cabinet	Qty	Copper 5E Patch Panel	Qty
NAP	3875 Huron River Dr	175-278	New UG	35	Wall	Enter into MDF	WCH-02P	1	CCH-CP12-A9	1				
HVA	1200 State Circle	157-268	Existing Duct	50	Rack	Existing Duct into MDF	CCH-01U	1	CCH-CP12-A9	1				

¹**Above-Ground Cabinets.** Supply and install Corning Cross-Connect Cabinets according to manufactures and City of Ann Arbor’s specifications identified on **Print #160-278, #160-270 and #160-266**. The table below provides above-ground cabinet information. This information is also provided on Page 22, Section 7 of Materials Specifications. Refer to Section M in the Construction Requirements Section for installation requirements.

Corning Cable Systems Optical Cross-Connects (OCC) Cabinet Specifications		
Item	Description	Quantity per Location
OCC-080-G	Pad-mountable version	1
PAD-OCC-CSS-02	Pad-mountable frame w/ cable storage area, 18 in. buried includes 6 inch buried pad mountable frame	1
OCC-PORT-KIT	Bottom Entry Panel w/ 6 watertight cable ports	(2 for each cabinet)