



May 15, 2020

Bidder:

Traverse City Light & Power (TCL&P) will receive sealed bids in the office of TCL&P, 1131 Hastings Street, Traverse City, Michigan, 49686, until **Friday, May 29, 2020 at 2:00 PM** for the following project:

ACTUARIAL SERVICES TO VALUE OTHER POST-EMPLOYMENT BENEFITS IN COMPLIANCE WITH GASB “OPEB SERVICES”
(specifications attached)

It is the sole responsibility of the Bidder to check the website for updates and addenda prior to the bid being submitted. Updates can be found using the following link: <http://www.tclp.org/Display/Items/RFPs>. Bidder may also sign up to receive notifications when bids and RFP’s are posted by sending an e-mail requesting same to stvardek@tclp.org.

TCL&P reserves the right to accept or reject any or all bids, waive irregularities, and to accept the bids either on an entire or individual basis that is in the best interest of TCL&P.

TCL&P accepts no responsibility for any expense incurred by the Bidder in the preparation and presentation of a bid. Such expenses shall be borne exclusively by the Bidder.

Only the successful Bidder will be notified. If you desire, you may call for results.

You must indicate on the **outside** of the sealed envelope that the bid is for the “OPEB Services.”

You must submit **TWO (2) SEALED COPIES** of the bid to TCL&P prior to the above-indicated time and date or the bid will not be accepted. Alternatively, E-Mailed bids will be accepted. Please indicate in the subject line of your e-mail that you are submitting a “Sealed Bid” together with the project description, “OPEB Services,” and submit your e-mailed bid to stvardek@tclp.org.

Please note that if you have previously submitted an informal quote, you will still need to submit a sealed bid prior to the date and time specified above in order to be considered. Please ensure that all requirements listed in the specifications are met.

Please direct ALL questions to: Karla Myers-Beman, Controller, Traverse City Light & Power, at (231) 932-4560 or kmyersbe@tclp.org before the bid is submitted.

PLEASE SUBMIT BID TO: Stephanie Tvardek, Scheduling & Operations Coordinator
Traverse City Light & Power
1131 Hastings Street
Traverse City, MI 49686



A. SCOPE OF WORK

Traverse City Light & Power (TCL&P) is seeking proposals from qualified professional actuary firms to provide services to value Other Post-Employment Benefits (OPEB) in compliance with Governmental Accounting Standards Board Statement No. 74/75 for fiscal year end June 30, 2020 through June 30, 2023 (2 years of actuarial services and 2 years of rollforward information).

Valuations must be performed in accordance with generally accepted actuarial standards of practice promulgated by the Actuarial Standards Board and based on the actuarial assumptions and methods prescribed by the State of Michigan.

A description of the employees' other post-employment benefits are located at:

1. Non-union employees

https://www.traversecitymi.gov/downloads/tclp_act_benefits_amended_8.pdf

2. Union employees

https://www.traversecitymi.gov/downloads/tclp_bu_cba_july_2017june_2020.pdf

3. Further information on the OPEB benefits is included in the Utility's financial statements provided in the link below.

<https://www.tclp.org/Uploads/Financials/TCLP%20audit%202019.pdf>

Total employee count is 38.

The primary objectives for this actuarial valuation include:

1. Ensure compliance with GASB Statement 74/75.
2. Determine OPEB related valuation and related roll-forward data for June 30, 2020 through June 30, 2023.
3. Prepare necessary information for inclusion in the utility and City's audited financial statements for the Fiscal Years ending June 30, 2020 through June 30, 2023. This includes providing all the information needed for the note to the financial statements for inclusion into the utility and City's financial statements that conform to all of the requirements of GASB Statement 74/75; and all of the required supplementary information required by the same. In addition, information required for State of Michigan annual reporting.

B. PROPOSAL REQUIREMENTS

1. The respondent's proposal must include a project plan for the actuarial services engagement to be performed under this RFP for the valuation of other post-employment benefits. The project plan should include, at a minimum, the following:
 - a) Approach and methodology for the valuation



- b) Approach and methodology to include compliance with GASB standards
 - c) Data requirements from the utility
 - d) Identification of project plan milestones
 - e) Schedule for project completion and issuance of report
 - f) Valuation report elements to include:
 - i. Actuarial present value of total projected benefits
 - ii. Actuarial accrued liability
 - iii. OPEB assets
 - iv. Unfunded actuarial accrued liability
 - v. Normal cost
 - vi. Annual required contribution as a dollar amount and as a percentage of Payroll
 - vii. Annual OPEB or actuarial determined contribution
 - viii. Net OPEB obligation
 - ix. Summary of data used for the valuation
 - x. Summary of actuarial methods and assumptions
 - xi. Financial notes to be included in the utility and City's audited financial statements in the GASB prescribed format.
2. Describe the governmental experience of the firm including the specific details regarding experience in the area of actuarial valuation services related to OPEB.
 3. Provide a list of municipal government references where the firm has provided OPEB actuarial valuation services in the past thirty-six (36) months. This list should indicate the names and contact information of finance officers in these municipalities.
 4. Provide information regarding staffing including the experience of the individuals who will be assigned to the engagement. This should also include each individual's relevant experience with municipalities and preparing OPEB actuarial valuations. Also, include information as to the annual training plan of the firm related to governmental services.
 5. Provide the proposed cost of services. TCL&P requires a firm, fixed fee for the actuarial valuation services for the three terms.
 6. Provide recalculations throughout the year on the actuarial determined contributions based on new hires, terminations and retirements.
 7. The successful bidder will be required to enter into a consultant agreement with Traverse City Light and Power.

C. PROPOSED TERM OF CONTRACT

The proposed term of the contract is three terms, up to and including OPEB actuarial valuation data to be used in the utility and City's audited financial statements as of June 30, 2020 through June 30, 2023. The utility may extend this agreement for an additional two terms.

D. SCHEDULE FOR SELECTION

Deadline for submittal of Questions:	May 20, 2020
Response to Questions:	May 22, 2020
Deadline for submittal of Proposal:	2:00 PM, May 29, 2020



Interviews (if necessary): TBD

E. INSURANCE REQUIREMENTS

The following insurance requirements must be met throughout the project:

- a. The Successful Bidder shall file with Traverse City Light & Power (TCL&P) satisfactory certificates of insurance prior to commencement of construction. The form, content and limits of such insurance, together with the insurer thereof in each case, shall be acceptable to TCL&P (Best rating of A or better.) Advance written notice will be given to TCL&P before any material modification, cancellation, or expiration of any policy covered thereby. Notice of policy material modification, cancellation, or expiration shall be made by certified mail to TCL&P.
- b. Should any of the insurance requirements stated herein be terminated by the Insurer, the Insurer will mail thirty days written notice to TCL&P. Failure to mail by the Insurer will not waive the obligation or liability of any kind upon the insurer affording coverage. These requirements must be stated on all certificates of insurance. Modifications of the standard cancellation clause is acceptable.
- c. All certificates shall list any exclusions which are nonstandard within the industry as they appear on the policy.
- d. Each insurance policy shall have an Additional Insured endorsement naming TCL&P, its officers, agents, directors, and employees (including the Engineer). The issuing company for comprehensive general liability and excess liability shall waive subrogation of all claims against parties named as additional insureds.
- e. The consultant shall provide the following insurance coverages.
 - Commercial general liability insurance coverage with a \$1,000,000 minimum.
 - Comprehensive Automobile Liability insurance coverage with a \$1,000,000 minimum.
 - Professional liability insurance coverage with a \$1,000,000 minimum.
 - Workers compensation pursuant to Michigan law



F. IRAN ECONOMIC SANCTIONS ACT

**Sworn and Notarized Affidavit of Compliance
Iran Economic Sanctions Act
Michigan Public Act No. 517 of 2012**

All bidders must submit the following certification statement in compliance with Public Act No. 517 of 2012 (the “Iran Economic Sanctions Act”) and attach this form to the bid. **Traverse City Light & Power shall not accept any bid that does not include this sworn and notarized certification of statement.**

The undersigned, the owner or authorized officer of _____ (the Bidder), hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an “Iran linked business” within the meaning of the Iran Economic Sanctions Act, and that in the event the Bidder is awarded a contract for the Actuarial Services to Value Other Post Employment Benefits in Compliance with GASB “OPEB Services”, the Bidder will not become an “Iran linked business” at any time during the course of performing the work or any services under the contract.

The Bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification is made, whichever is greater, the cost of Traverse City Light & Power’s investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a Request for Proposal for 3 years from the date it is determined that the person has submitted the false certification.

BIDDER

By: _____

Its: _____

Date: _____

STATE OF _____)

COUNTY OF _____)

This instrument was acknowledged before me on the _____ day of _____, _____, by

_____ .

_____, Notary Public

_____ County, _____

My Commission Expires: _____

Acting in the County of: _____



G. BID SUMMARY

Bidder – Please complete and return

TITLE: Actuarial Services to Value Other Post-Employment Benefits in Compliance with GASB “OPEB Services”

DUE DATE: Friday May 29, 2020 at 2:00 PM

Having carefully examined the specifications and any other applicable information, the bidder proposes to furnish all items necessary for and reasonably incidental to the proper completion of this bid. Bidder submits this bid and agrees that the bid may not be withdrawn for a period of thirty (30) days from the actual date of the opening of the bid.

Bidder understands and agrees, if selected as the successful bidder, to accept a Contract (Attachment A) from TCL&P and to provide proof of any required insurance.

Bidder submits this bid and agrees to meet or exceed all TCL&P’s requirements and specifications unless otherwise indicated in writing and attached hereto.

Bid forms are to be completed, including bid sheet, and submitted. Additional sheets may be used and submitted with bid.

Bidder understands that TCL&P reserves the right to accept any or all bids in whole or in part and to waive irregularities in any bid in the best interest of TCL&P. The bids will be evaluated and awarded on the basis of the best value to TCL&P. Criteria used will include, but not be limited to, bidder/Successful Bidder’s ability, qualifications, experience, price and overall capability meeting the needs of TCL&P. TCL&P is sales tax exempt – Government.

Bidder shall pay all sales, consumer, use and other similar taxes required to be paid by Bidder in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the work.

The Bidder certifies that it is in compliance with the City of Traverse City’s Nondiscrimination Policy as set forth in Administrative Order No. 47 and Chapter 605 of the City’s Codified Ordinances.

The Bidder certifies that none of the following circumstances have occurred with respect to the Bidder, an officer of the Bidder, or an owner of a 25% or more share in the Bidder’s business, within 3 years prior to the bid:

- a) conviction of a criminal offense incident to the application for or performance of a contract;



- b) conviction of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense which currently, seriously and directly reflects on the Bidder's business integrity;
- c) conviction under state or federal antitrust statutes;
- d) attempting to influence a public employee to breach ethical conduct standards; or
- e) conviction of a criminal offense or other violation of other state, local, or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of TCL&P indicates that the bidder is unable to perform responsibility or which reflects a lack of integrity that could negatively impact or reflect upon TCL&P, including but not limited to, any of the following offenses or violations of:
 - i. The Natural Resources and Environmental Protection Act.
 - ii. A persistent and knowing violation of the Michigan Consumer Protection Act.
 - iii. Willful or persistent violations of the Michigan Occupational Health and Safety Act.
 - iv. A violation of federal, local, or state civil rights, equal rights, or non-discrimination laws, rules or regulations.
 - v. Repeated or flagrant violations of laws related to the payment of wages and fringe benefits.
- f) the loss of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.

Terms: Payment will be made as soon as possible after invoicing.

Bidder certifies that as of the date of this bid, Bidder's company or Bidder is not in arrears to TCL&P or the City of Traverse City for debt or contract and is in no way a defaulter as provided in Section 152, Chapter XVI of the Charter of the City of Traverse City.

Bidder agrees that the bid may not be withdrawn for a period of thirty (30) days from the actual date of the opening of the bid.

Please direct ALL questions to: Karla Myers-Beman, Controller, Traverse City Light & Power, at (231) 932-4560 or kmyersbe@tclp.org.



H. SUBMISSION FORM

By submitting a response to this RFP you acknowledge that TCL&P may be required from time to time to release records in its possession under the Michigan Freedom of Information Act. By submitting a response, you hereby give permission to TCL&P to release any records or materials submitted by you as TCL&P may be requested to do so as permitted by the Freedom of Information Act, MCL 15.231 et seq.

Submitted by:

_____ Signature		_____ Company Name		
_____ Name and Title (Print)		_____ Company Address		
_____ Phone	_____ Fax	_____ City,	_____ State,	_____ Zip
_____ Sole proprietorship/partnership/corporation				
_____ If corporation, state of corporation				
Bid Total: \$ _____				

The Successful bidder's name shall appear as follows on any Contract or Purchase/Service Order documents:

Company Name

Contract or Purchase/Service Order documents shall be mailed to:

Attention

Street Address

City, State, Zip

Email Address



REFERENCES: (include name of organization, contact person, and daytime phone number).

1.

Name of Organization

Contact Person

Phone Number

2.

Name of Organization

Contact Person

Phone Number

3.

Name of Organization

Contact Person

Phone Number

**TRAVERSE CITY LIGHT AND POWER DEPARTMENT
CONSULTANT AGREEMENT**

THIS AGREEMENT made this ____ day of _____, 2020, by and between the TRAVERSE CITY LIGHT AND POWER DEPARTMENT, a Michigan municipal electric utility, whose address is 1131 Hastings St., Traverse City, Michigan, 49686, ("TCL&P"), and _____, Michigan (the "CONSULTANT");

WITNESSETH:

WHEREAS, TCL&P desires to engage the services of the Consultant to furnish technical and professional assistance concerning the project which is described as:

(The "Work")

and the Consultant wishes to furnish such technical and professional service to TCL&P and has represented that Consultant has the education, expertise, capability and the necessary licenses to perform such services;

THEREFORE, the parties mutually agree as follows:

1. Scope of Services. The Consultant shall provide services in accordance with and as set forth in Schedule "A", Scope of Services, attached hereto and incorporated herein by reference.
2. Compensation and Method of Payment. TCL&P shall pay to the Consultant and the Consultant agrees to accept as full compensation for services under this Agreement **[insert flat fee, estimate with attached rates, or not-to exceed figure with attached rates]** in accordance with Schedule "B", "Timetable for Activities and Schedule of Payments", attached hereto and incorporated herein by reference.
3. Period of Performance. The services to be rendered under this Agreement shall commence within five (5) working days of execution hereof. Performance shall be in accordance with the schedules attached hereto.
4. Independent Contractor. The relationship of the Consultant to TCL&P is that of an independent contractor and in accordance therewith, Consultant covenants and agrees to conduct itself consistent with such status and that neither it nor its employees, officers or agents will claim to be an officer, employee or agent of TCL&P or make any claim, demand or application to or for any rights or privileges applicable to any officer or employee of same, including but not limited to worker's compensation coverage, unemployment insurance benefits, social security coverage, or

retirement membership or credit. The parties do not intend the services provided by Consultant to be a joint endeavor.

5. Consultant Responsibility. The Consultant shall perform the work in a good and workmanlike manner and assumes the risk in performing under this Agreement. Consultant shall be solely responsible and answerable in damages for all improper work, accidents or injuries to person or property.

6. Indemnity. Consultant shall defend, indemnify and save harmless TCL&P, its officers and employees, from and against any and all claims, liabilities, losses, damages, actual attorney's fees and settlement expenses for injury or death of any person and damage or loss of any property allegedly or actually resulting or arising out of any act, omission, or negligence of Consultant or its employees, agents or subcontractors, in connection with performing this Agreement, or the joint negligence of TCL&P and that of Consultant, Consultant's employees, agents or subcontractors. This indemnification agreement shall not be limited by reason of any insurance coverage.

7. Insurance. The Consultant shall acquire and maintain commercial general liability insurance coverage, comprehensive automobile liability insurance coverage, and professional liability coverage. The limits and deductible applicable to them shall be as follows:

- A. Commercial general liability insurance coverage with a \$1,000,000 minimum.
- B. Comprehensive Automobile Liability insurance coverage with a \$1,000,000 minimum.
- C. Professional liability insurance coverage with a \$1,000,000 minimum.

The Consultant agrees not to change and agrees to maintain such insurance throughout the period of performance of this Agreement. Consultant will upon execution of this Agreement provide a certificate of insurance to TCL&P. Such certificate shall name TCL&P as an additional insured.

8. Workers Compensation. The parties shall maintain suitable workers compensation insurance pursuant to Michigan law and Consultant shall provide a certificate of insurance or copy of state approval for self insurance to TCL&P upon execution of this Agreement.

9. Compliance with Regulations. The Consultant shall comply with all applicable statutes, rules and regulations of all Federal, State and local governments and agencies having jurisdiction, and bears the risk of any such authorities or changes thereto.

10. Standard of Conduct. Consultant shall render all services under this Agreement according to generally accepted professional practices for the intended use of the work or project.

ATTACHMENT A

11. Confidentiality. Consultant agrees that it, its employees, agents, and subcontractors, will not at any time, either directly or indirectly, communicate to any person, firm, corporation or public entity, in any manner whatever, any information concerning any matters affecting or relating to the business, records or other business data of TCL&P without the express written consent of the executive director of TCL&P. This promise of confidentiality is made without regard to whether any or all of the information would be deemed confidential, material or important. The parties stipulate that as between them, all information arising from Consultant's services are important, confidential, material and affect the successful conduct of the business of TCL&P and its goodwill. The parties are not bound by this clause where disclosure is required by law or court order.

12. TCL&P's Obligation. TCL&P shall provide Consultant with all information currently available to TCL&P upon request of the Consultant. The Executive Director shall designate a TCL&P employee to be TCL&P's representative for purposes of this Agreement.

13. Non-Discrimination. The parties 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 race, color, religion, national origin, age, sex, height, weight, marital status, physical or mental disability, family status, sexual orientation, gender identity, or genetic makeup. Breach of this covenant may be regarded as a material breach of this Agreement.

14. Prohibition Against Assignment. This Agreement is intended to secure the service of Consultant because of its ability and reputation and none of the Consultant's duties under the Agreement shall be assigned, subcontracted, or transferred without the prior written consent of TCL&P. Any assignment, subcontract or transfer of Consultant's duties under this Agreement must be in writing and approved by both parties.

15. Third Party Participation. The Consultant agrees that despite any subcontract entered into by the Consultant for execution of activities or provision of services related to the completion of this project, the Consultant shall be solely responsible for carrying out the project pursuant to this Agreement. The Consultant shall specify in any such subcontract that the subcontractor shall be bound by this Agreement and any other requirements applicable to the Consultant in the conduct of the project unless TCL&P and the Consultant agree to modification in a particular case. The Consultant shall not subcontract unless agreed upon in writing by TCL&P. It is hereby agreed to that _____ may act as a subcontractor to the Consultant.

16. Interest of Consultant. The Consultant represents that its officers and employees have no interest and covenant that they will not acquire any interest direct or indirect, which would conflict in any manner or degree with the performance of Consultant's services and duties hereunder. The

ATTACHMENT A

Consultant further covenants that in the performance of the Agreement, no person having any such interest shall be employed. Consultant further covenants that neither it nor any of its principals are in default to TCL&P.

17. Covenant Against Contingent Fees. The Consultant warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon any agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees. For breach of violation of this warranty, TCL&P shall have the right to annul this Agreement without liability, or in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

18. Qualifications of the Consultant. The Consultant specifically represents and agrees that its officers, employees, agents and consultants have and shall possess the experience, knowledge, and competence necessary to qualify them individually for the particular duties they perform hereunder.

19. Notice. Whenever it is provided in this Agreement that a notice or other communication is to be given or directed to either party, the same shall be given or directed to the respective party at its address as specified in the Agreement, or at such other address as either party may, from time to time, designate by written notice to the other.

20. Amendments. This Agreement may be modified from time to time, but such modifications shall be in writing and signed by both parties.

21. Termination.

A. For Fault. If TCL&P determines that the Consultant has failed to perform or will fail to perform all or any part of the services, obligations, or duties required by this Agreement, TCL&P may terminate or suspend this Agreement in whole or in part upon written notice to the Consultant specifying the portions of the Agreement and in the case of suspension shall specify a reasonable period not more than thirty (30) days nor less than fifteen (15) days from receipt of the notice, during which time the Consultant shall correct the violations referred to in the notice. If the Consultant does not correct the violations during the period provided for in the notice, this Agreement shall be terminated upon expiration of such time. Upon termination, any payment due the Consultant at time of termination may be adjusted to cover any additional costs occasioned TCL&P by reason of the termination. This provision for termination shall not limit or modify any other right to TCL&P to proceed against the Consultant at law or under the terms of this Agreement.

B. Not for Fault. Whenever TCL&P determines that termination of this Agreement in whole or in part is in the best interest of TCL&P or in the event that termination is required by any State or Federal agency, TCL&P may terminate this Agreement by written notice to the Consultant

ATTACHMENT A

specifying the services terminated and the effective date of such termination. Upon termination, the Consultant shall be entitled to and TCL&P shall pay the costs actually incurred in compliance with this Agreement until the date of such termination plus any costs the Consultant incurs directly resulting from such termination.

22. Interpretation. This Agreement shall be governed by the laws of the State of Michigan, both as to interpretation and performance. This Agreement was drafted at the joint direction of the parties. The pronouns and relative words used herein are written in the neuter and singular. However, if more than one person or entity joins in this Agreement on behalf of Consultant, or if a person of masculine or feminine gender joins in this Agreement on behalf of Consultant, such words shall be interpreted to be in the plural, masculine or feminine as the sense requires.

23. Dispute Resolution. If any party has a dispute with another regarding the meaning, operation, or enforcement of any provision of this Agreement, the disputing parties agree to meet and confer to negotiate a resolution of the dispute. They further agree as follows:

- (a) Mediation. If they are unable to resolve the dispute themselves, and before formally instituting any other dispute mechanism, they shall utilize the services of a mutually acceptable neutral mediator, who meets the qualifications of MCR 2.411, to bring them together in at least one mediation session.
- (b) Venue. All meetings, hearings and actions to resolve the dispute shall be in Grand Traverse County.
- (c) Initiation. A party may initiate mediation by written request and proposing a mediator. The other party shall promptly respond in writing and cooperate in the scheduling. Violation of this provision is a material breach of this contract and a party in such breach is responsible for all the other party's actual attorney fees and costs in filing a lawsuit through conclusion of mediation.

24. Entire Agreement. This Agreement, together with all items incorporated herein by reference, constitutes the entire agreement of the parties and there are no valid promises, conditions or understandings which are not contained herein. It is understood that should Consultant recommend further work concerning the project, TCL&P is under no obligation to engage Consultant in such work.

25. Third Party Beneficiaries. The parties do not intend for there to be any third party beneficiaries to this agreement.

26. Authority to Execute. The parties agree that the signatories appearing below have the

ATTACHMENT A

authority and are duly authorized to execute this Agreement on behalf of the party to the Agreement.
IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date and year first
above written.

WITNESS:

TRAVERSE CITY LIGHT AND POWER
DEPARTMENT

By: _____
Tim Arends, Executive Director

CONSULTANT

By: _____

The form of this agreement has been pre-approved by:

W. Peter Doren, Esq.
Sondee, Racine & Doren, PLC
Traverse City Light & Power General Counsel

SCHEDULE A

SCOPE OF SERVICES

The parties agree that the Work for TCL&P shall consist of the following:

SAMPLE

SCHEDULE B

TIMETABLE FOR ACTIVITIES

Contractor shall commence the Work within five (5) working days after execution of this Agreement. The schedule of activities shall follow the "Work Plan Schedule" attached as part of Schedule B, incorporated herein by reference.

Services shall be completed not later than X.

SCHEDULE OF PAYMENTS

Payments shall be made to the Consultant as follows: