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- 2) Prepare preliminary cover, index standards list, and notes sheets.
  - 3) Conceptual detail drawings will be provided and discussed.
  - 4) Provide preliminary specifications index.
  - 5) Submit above as 30% design submittal to: Project Review Team for QC and DWC for review.
  - 6) Perform two geotechnical boring and logs up to 30 feet deep to augment geotechnical information collected during the transmission main geotechnical investigations.
  - 7) Compile an inventory of the trees planned for removal or pruning due to construction.
  - 8) Meet with DWC and WaterLink Communities to review drawings. Address and incorporate comments into final 30% set and submit to DWC. Up to Six (6) meetings are included in this proposal.
- e. 75% Permit Plan and Profile Drawings and Specifications:
- 1) Prepare a draft drawing set including chemical monitoring and feed station elements and requirements for construction. Include any revisions required via field investigation. Set to include draft cover, index, standards list, and notes sheets; erosion control plan; demolition plan, if required; draft site plan including existing underground utilities; detailed civil, structural, mechanical, piping, architectural, electrical, landscaping, and control drawings. Draft specifications, including general requirements and technical specifications.
  - 2) Prepare detail drawings.
  - 3) As the design progresses, develop and refine the strategy and plan for construction contract sequencing, improvements scheduling and operations during construction to improve project delivery and reliability and improve funding opportunities.
  - 4) Submit the 75% draft drawings and specifications to: Project Review Team for QC, DWC for review; and impacted communities for comment.
  - 5) Meet with DWC and WaterLink Communities to review drawings. Address and incorporate comments into final 75% set and submit to DWC.

- 6) Submit 75% documents to the IEPA and other permitting entities for review and comment. Meet with IEPA and other entities, as defined in Task 2h, to receive comments. Incorporate comments into 90% documents for permitting.
- f. 90% Permit Plan and Profile Drawings and Specifications:
  - 1) Prepare prefinal plan set and final draft mains specifications, including general requirements and technical specifications.
  - 2) Submit the 90% draft drawings and specifications to: Project Review Team for QC, DWC for review; permitting entities as required, and adjacent utilities to review.
  - 3) Address and incorporate comments from the 90% submittal as provided by Project Review Team, DWC, permit agencies, and impacted communities.
  - 4) Submit sealed documents to IEPA and other entities for permitting.
  - 5) Field-Walk thru with DWC and/or WaterLink Communities.
- g. 100% Permit Plan and Profile Drawings and Specifications:
  - 1) Prepare, sign, and seal final drawing set and final specifications.
  - 2) Incorporate front end bidding documents in specifications.
  - 3) Submit the 100% complete drawings and specifications to DWC.
  - 4) Plans will be submitted in AutoCAD and PDF formats along with two (2) printed copies.
  - 5) Specifications will be provided in Microsoft Word and PDF formats. Specification PDFs will be indexed and searchable.
- h. QC to be provided by SCI & REL.

9. Task 9 – Permitting:

Approvals and Authorizations: Consultant will assist DWC in obtaining the following approvals, permits, and authorizations:

- a. IEPA Permit Coordination: Prepare the required documentation for signature by DWC and meet with the Agency to assist the procurement of Project permits as further describe in the preceding section.
- b. IDOT and other highway/roadway authorities – Naperville, Kendall County, Will County, DuPage County, and various Townships
- c. USACE – wetlands and Fox River crossing.

- d. IDNR – Fox River, other stream crossings > 1 square mile watershed.
- e. Railroads – CNRR, ILRW and BNSF.
- f. Commission will pay required permit fees via WaterLink escrow account.

10. Task 10 – Bidding Assistance and Contractor Selection:

- a. Provide bid assistance, including contractor identification, solicitation, qualification, bid review, responses to RFI information, attendance to pre-bid meetings and bid opening meetings, review and evaluation of bid proposals, and attendance and presentation at DWC Board meetings, as well as WaterLink community public meeting, if requested.
- b. Assemble and provide up to six (6) bid packages.
- c. Attend and assist in leading up to six (6) pre-bid meeting. Prepare agenda and meeting minute notes summarizing each meeting.
- d. Addenda Preparation Assistance: Assist with responses to bidders' questions during the bid period. Assist in preparation of necessary addenda.
- e. Bid Review Assistance: Assist in evaluation of bids and make recommendation of award of contract at Board meeting.
- f. Conformed Contract Documents: Prepare conformed construction documents that incorporate modifications to the drawings and specifications included in Addenda issued during the Bidding Phase.

**END OF BASIC SERVICES**

B. Phase II Additional Services:

1. Task 1 – Survey Services (REL Lead)

- a. The intent of this work is to augment available paper records, GIS, utility and aerial photogrammetric information with on the ground field measurements of physical features for the purpose of confirming information to the level of accuracy needed for construction drawings. Due to the desired project design time frame, and challenges associated with collecting aerial LiDAR data during the summer months, Phase I route alignment studies utilized primarily GIS aerial and contour data supplemented by certain specific ground survey data collection at key locations and utility company data of varying precision levels. Phase II drawings will primarily utilize aerial LIDAR data collected in December 2023, supplemented by detailed ground survey efforts summarized in the following paragraphs.

- b. Collection of rim/invert data at approximately 1,800 utility structures along the watermain route to allow for the development of accurate final design of the project improvements.
  - c. Complete topographic survey data collection in those areas along the 31-mile route that were unable to be collected via aerial LIDAR in Phase I due to tree cover or other obstacles.
  - d. Complete topographic survey data collection at seven (7) proposed metering stations and one (1) chlorine treatment building for purposes of preparing detailed site plans for these facilities. The chlorine treatment site will also include a formal boundary survey and order of title commitment for use in the acquisition of real estate for this facility.
  - e. Combine data, including GIS contour data from DuPage, Kendall, and Will Counties, supplemental topographic, rim/invert, SUE/potholing and utility data from various sources, GNSS/GPS and terrestrial, within Autodesk Civil 3D base CAD files and construct a triangulated irregular network (TIN) model across the project length to be able to generate proposed 1"=50' plan and profile sheets on a consistent and unified vertical and horizontal datum. TIN model will also allow for 3-D utility modeling at specific locations to verify proposed water main elevations. Identification of property corner details for purposes of right-of-way verification and/or future easement acquisition will be completed as determined by Consultant. The estimated length of plan/profile sheets across two final route alignments is 35 miles (200 total sheets).
  - f. Arborist
    - 1) Provide the services of an Illinois Certified Arborist to identify trees that will need protection during construction.
    - 2) Identify the form of protection to be provided for individual trees.
    - 3) Provide construction details for needed means of protection for incorporation into the water transmission system drawings.
2. Task 2 – Geotechnical and CCDD Services (REL Lead)
- a. Provide up to 200 soil borings at approximately 1,000-foot intervals along entire route, and on both sides of 10 remaining tunnel crossings (e.g., crossings of IDOT highways, Fox River, etc.), not completed during Phase I. This work will also include field staking of all boring locations and correlating elevation data at boring locations with Survey data in Task 5
  - b. Conduct a preliminary Clean Construction/Demolition Debris (CCDD) sampling and testing evaluation during the advancement of

approximately 75 geotechnical soil borings to identify potentially clean and potentially contaminated areas along the proposed water main project area. Collect soil samples during the boring operation for testing. Note: Per ComEd, no CCDD investigations will be performed within ComEd right-of-way. Collected soil samples will be submitted to an accredited laboratory with a standard turnaround time for analytical testing results. The testing parameters in the identified PIP project areas will include VOCs, SVOCs, RCRA 8 Total Metals, pH and possibly TCLP or SPLP testing on 7 of the 8 RCRA metals, as determined necessary by Consultant.

- c. Prepare five (5) geotechnical reports including all boring logs outlining the findings of the sample program, signed, and sealed by an Illinois registered professional engineer. These reports will be structured to include all locations within the four respective transmission main construction contracts and the one metering station contract, in order to make them for use by bidders on each construction package.
  - d. Prepare five (5) environmental reports summarizing laboratory results and CCDD construction recommendations of the sample program, prepared by an experienced senior scientist. These reports will be structured to include all locations within the four respective transmission main construction contracts and the one metering station contract, in order to make them readily usable by bidders on each construction package.
3. Task 3 – Subsurface Engineering (SUE) (REL Lead)
- a. Provide SUE services field surveys along approximately 25 miles of the pipeline route within urbanized areas expected to have the most utilities impacting the proposed water transmission main construction to verify other utility (gas pipelines, oil pipelines, fiber optic lines, telecommunication lines, etc.) elevations, together with design JULIE locates at key crossings would be performed. This effort would supplement aerial LIDAR and field elevation data to be collected and combined into the project base CAD files. Specific spot SUE field surveys within approximately 6 miles of rural areas will also be performed on an as needed basis.
  - b. Provide up to 200 utility potholing and associated grass and pavement restoration. Potholes and/or vacuum excavations at key utility crossing locations to be performed by a local contractor. Relevant utility conflicts will be identified and assessed early on during the design effort. This effort also includes field staking of potholing locations, obtaining elevation data for excavated utilities, and adding them to 3D utility model.

4. Task 4 – Right-of-Way / Easement Acquisition (REL Lead)
  - a. Manage the solicitation, documentation, and ultimate purchase/assembly of the identified easements from Phase I in conjunction with DWC Staff.
  - b. Obtain and manage up to 20 additional title commitments as may be required due to potential route changes.
  - c. Prepare plats of easement with associated legal descriptions for approximately 150 parcels along proposed water transmission main route as identified during Phase I. Plats and legal descriptions to be signed and sealed by registered Illinois Professional Land Surveyor.
  - d. Assist DWC to acquire properties and easements utilizing professional acquisition services applicable to federally funded projects including certified appraisals, review appraisals and negotiations as may be applicable. Needed property shall be acquired by fee simple, dedication, temporary/permanent easement, or temporary use permit as determined by DWC and design team.
  - e. Make determinations of appraised fair market value in accordance with the IDOT Land Acquisition Policies and Procedures Manual (LAPPM) and the Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book). An Appraisal Review Certification shall be prepared for review appraisals by the Review Appraiser in accordance with the Yellow Book and LAPPM.
  - f. Act as DWC representative with affected property owners in leading land acquisition negotiations. The Negotiator will work with the design team and DWC staff to develop schedules, maintain communications and provide progress reports throughout the project.
  - g. Provide necessary documentation for eminent domain action by DWC for parcels unable to reach negotiated settlements, and coordinate with DWC attorneys as may be needed.
  - h. Provide title review and an attorney’s approval letter for each affected parcel.
  - i. Attend real estate closings for each acquired parcel.
5. Task 5 – Phase I Environmental Site Assessment (ESA) (SCI Lead)
  - a. Complete and update a Phase I ESA along the 31-mile route in accordance with the American Society for Testing and Materials (ASTM) Practice E1527-21. The purpose of the Phase I ESA is to identify the presence or absence of Recognized Environmental Conditions (RECs) as defined by the standard.

- b. The Phase I ESA process includes a search of standard historical sources (e.g., aerial photographs, topographic maps, and historical fire insurance maps), a review of federal and state environmental databases, interviews with past and present owners, operators, and occupants of the site, and an on-site reconnaissance to determine the presence or absence of RECs.
  - c. Visit the sites to examine and document the current uses and conditions. Seek owners to ask pertinent questions, including those outlined as user responsibilities on the questionnaire in ASTM E1527-21. A title search is not part of this scope of services.
  - d. Make reasonable attempt to conduct interviews with the current owner, available past owners, and occupants, state and local regulators, the local fire department, and other persons or agencies that may have knowledge of current or historical environmental conditions at the site.
6. Task 6 – Wetland Delineation (SCI Lead)
- a. Under Phase I, the ComEd corridor was visited and studied to complete the necessary ComEd checklists. Under Phase II, the wetlands study will be updated and completed based on the final alignment. Impacted areas will be evaluated for the presence of wetlands and other Waters of the United States (WOTUS). This information will be used to avoid and/or minimize impacts to WOTUS and other areas of special concern. To minimize the amount of field work necessary, a desktop review of the area will be performed prior to the site visit. This will involve gathering background information pertaining to the site such as local soil survey data, previously performed wetland delineations (if available), and National Wetland Inventory (NWI) maps.
  - b. Delineation of the Site will be done in accordance with USACE 1987 Manual and the August 2010 USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region and will take place within the USACE recognized wetland growing season. The wetland delineation will be based on soil composition, hydrology of the site, and vegetation present at the time of the site visit. Observations will be documented on approved USACE data forms and included in the final report. If wetlands are found to exist within project boundaries, their limits will be recorded using a handheld GPS device for use in Arc GIS software and added to the plan and profile sheets as applicable. It is assumed that consultant personnel will be granted access to the property, and that project personnel will be available to answer questions prior to, during, and/or following site reconnaissance activities.

7. Task 7 – Phase I Archaeology and Cultural (SCI Lead)
  - a. Complete cultural study based on final alignment. The primary objective of a Phase I cultural resources survey is to identify and record all cultural resources within a project area. Cultural resources can include prehistoric Native American habitation sites, historical farmstead sites, standing structures, or other man-made features such as earthworks, old roadbeds, or cemeteries. The study will also detail avoidance and minimization measures identified in consultation with the State Historic Preservation (SHPO) and/or Tribal Historic Preservation Officer (THPO).
  - b. Perform Phase I archaeology study due to proximity of the alignment to cemeteries. For Phase I surveys, portions of a survey area must be examined by systematic shovel testing whenever possible, in combination with systematic pedestrian survey, and/or additional techniques such as augering, coring, soil probes, or mechanically excavated trenching, depending upon the surface conditions and potential for deeply buried archaeological sites.
8. Task 8 – Special Species Survey (SCI Lead)
  - a. Construction disruption to land may also disturb the native habitat on the site. Given this possibility, WIFIA funding requires a Threatened, Endangered, and Special-Status Species Survey to determine if the proposed alignment serves as a habitat for one of these protected species. Both desktop and fieldwork will be performed to identify and map special status habitats. Should a habitat be identified, additional survey to determine breeding and spawning seasons, migration, growth and propagation and activity periods.
9. Task 9 – WIFIA PEA Checklist (SCI Lead)
  - a. The Programmatic Environmental Assessment (PEA) Environmental Questionnaire helps verify the applicability of the PEA for a Water Infrastructure Finance and Innovation Act (WIFIA)-funded project. Compliance with other federal and state environmental laws and regulations is required, as appropriate and applicable. The WIFIA PEA Checklist will be utilized by EPA to determine on Categorical Exclusion for the project.
  - b. Tasks 5-8 above are required as part of the WIFIA PEA Checklist. The Checklist also included additional research and studies including impacts to biological resources, geology and soils, socioeconomic and environmental justice, land use, transportation and traffic, utilities and community services, air quality, human health and safety, impacts from noise and vibration and hazardous and toxic materials and waste.

10. Task 10 – Supplemental Hydraulic Modeling (SCI Lead)
  - a. Supplemental hydraulic modeling will be performed on an additional service basis. This task is to study and evaluate pipeline sizes, pressure, hydraulic grade lines, and velocities based on final water demand requests for non-WaterLink customers or on an as-needed basis by the Commission.
  - b. DWC will assist in information transfer from the requesting customer.
  - c. The existing Innowyze InfoWater model will be used for these evaluations.
  - d. Reconfirm existing data points in the model such as elevations and pressures and add/modify determined elevations, fittings, valves, segment lengths, discharge locations, and flow rates along the route that may impact system operations.
  - e. Summarize findings in a technical memorandum to the Commission.
11. Task 11 – Cathodic Protection Design & Field Investigation (LAN Lead)
  - a. Perform electromagnetic conductivity survey of the existing soil along the entire pipeline alignment.
  - b. Changes in soil resistivity will be confirmed and measured using the Wenner Four Pin Method, and upon analyzing the soil resistivity data, recommendations for further soil testing will be provided to the Geotechnical Engineer.
  - c. Prepare a cathodic protection memorandum in coordination with pipe materials memorandum, outlining the various design requirements for pipe materials proposed for consideration.
  - d. Determine if soil conditions and potentials are corrosive to metallic structures.
  - e. Evaluate areas along the route for stray current sources.
  - f. Design piping system for continuity and isolation.
  - g. Estimate current requirement for cathodic protection system and design cathodic protection system to meet demands.
  - h. Prepare cathodic protection details and technical specifications for inclusion in the contract documents.
  - i. Four trips (4) for professional corrosion engineer to visit site.
  - j. Does not include induced AC current mitigation design.

- 12. Task 12 – Additional Bid Package Allowance (by Authorization Only)
  - a. Allowance to split Transmission Main Design Package No. 1 under Task 3 Basic Services into two (2) separate bid packages to allow for pipeline and associated restoration along Book Rd to be constructed separately. This portion of the project has no easement acquisition required from private land owners, so prioritizing this segment may prove beneficial to the overall project schedule.
  - b. This task will only be used with authorization from DWC.
- 13. Task 13 – Owner Design Contingency Allowance (by Authorization Only)
  - a. Allowance to cover changes in project scope.
  - b. This task will only be used with authorization from DWC.

**END OF ADDITIONAL SERVICES**

3. **Approvals and Authorizations:** Consultant shall obtain the following approvals and authorizations:

None

4. **Commencement Date:**

Effective Date of This Task Order

5. **Completion Date:**

N/A

6. **Submittal Schedule:**

N/A

7. **Key Project Personnel:**

Lockwood, Andrews & Newnam, Inc.	Stanley Consultants, Inc.	Robinson Engineering, Ltd.
Warren Green, PE Project Director	Kate Despinoy, PE Project Manager	Aaron Fundich, PE Project Manager
Ozzie Garza, PE Project Manager	Larry Thomas, PE Quality Control	Jennifer Prinz, PE Quality Control





The Effective Date of this Task Order is March 19, 2026.

DuPAGE WATER COMMISSION

By: \_\_\_\_\_  
Paul D. May, P.E. General Manager

DWC DESIGNATED REPRESENTATIVE FOR TASK ORDER:

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Lockwood, Andrews & Newnam, Inc.

By: \_\_\_\_\_

Name: J. Warren Green, P.E.  
Title: Vice President/Chief Engineer

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: J. Warren Green, P.E.  
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